PREPARING PRESERVICE TEACHERS TO TEACH READING COMPREHENSION TO ELEMENTARY STUDENTS FROM CULTUALLY DIVERSE BACKGROUNDS

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Abstract

As classrooms become more culturally diverse, many preservice teachers (PSTs) enter their teaching practicums with beliefs, knowledge, and pedagogical skills that may be a cultural mismatch for the diverse learners they teach (Castro, 2010). This cultural disconnect is highlighted in the problem of practice concerning PSTs' preparedness to teach reading comprehension to students from culturally diverse backgrounds. The purpose of the study was to address the underlying factor of limited teacher education multicultural education instruction by infusing the Culturally Responsive Reading Comprehension Instruction Intervention (CRRCII) into a reading methods course to help PSTs develop the knowledge, skills, and self-efficacy to teach reading comprehension to diverse students.

Grounded in Bandura's (1986) self-efficacy theory, particularly mastery experiences and social persuasion, the CRRCII included three instructional components situated within a culturally responsive teaching framework. The instructional components included cyclical interaction between focus lessons on research-based reading comprehension instruction, field experiences where PSTs taught reading comprehension to a student from a culturally diverse background, and reflective learning experiences that helped PSTs critically reflect on their learning. This study included 10 White PSTs enrolled in a small, American Midwest university and used a convergent parallel mixed methods design. Data were collected from pre- and post-surveys, an observation checklist, focus group interviews, and reflection journals. Quantitative data were analyzed using descriptive statistics, t-tests, and McNemar's tests. Qualitative data were deductively analyzed using a priori codes. Study findings revealed that PSTs demonstrated growth in their knowledge and significant positive change in their skills and self-efficacy to teach reading comprehension to students from diverse cultural backgrounds as a result of

participating in the CRRCII. These results suggest that the CRRCII learning components could be included in future reading methods courses to prepare PSTs to capably teach reading comprehension to students from diverse cultural backgrounds.

Keywords: Preservice teachers, culturally responsive teaching, multicultural education instruction, reading comprehension instruction, culturally diverse learners

Primary Reader: Dr. Beth Kobett; *Secondary Readers;* Dr. Karen Karp, Dr. Elizabeth Brown

Dedication

This dissertation is dedicated to my parents, John and Perle Vander Kolk. Thank you for providing me with such a rich foundation for learning and for life.

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This dissertation reflects the investment of many generous individuals who supported my success. I am deeply grateful to each of you.

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Executive Summary

As classrooms become more culturally diverse, many White preservice teachers (PSTs) enter their teaching practicums with a set of beliefs, knowledge, and pedagogical skills that may be a cultural mismatch for the diverse learners they teach (Castro, 2010). Preservice teachers' beliefs about students from diverse cultural backgrounds can limit the PSTs' abilities to recognize the unique gifts and challenges that students from culturally diverse backgrounds bring to the classroom (Castro, 2010). These beliefs may include negative perspectives such as deficit views (Baldwin, Buchanan, and Rudisill, 2007), colorblindness (Blaisdell, 2005), or stereotypes (Amos, 2011). Beliefs such as these can influence PSTs' expectations for diverse students and may curtail the rigor of the instruction they plan for them (Kumar & Hamer, 2012). Preservice teachers' knowledge about how culture influences teaching and learning also influences their preparedness to effectively teach students from diverse backgrounds (Lazar, 2007). Without an understanding of how culture influences learning and a recognition of the strengths that diverse students bring with them to the classroom, PSTs can misinterpret students from diverse backgrounds as dependent learners (Barnes, 2006). Preservice teachers' possible cultural disconnect with diverse students is highlighted in the problem of practice concerning PSTs' preparedness to teach reading comprehension to elementary students from culturally diverse backgrounds.

Factors Related to Preservice Teachers' Preparedness

Several complex factors help explain the problem of practice concerning PSTs' preparedness to teach reading comprehension to elementary students from culturally diverse backgrounds. A review of the literature reveals a complex interplay of teacher education program factors and PSTs' beliefs about teaching diverse students. The teacher education program factors

include accreditation (Brabeck & Koch, 2013), certification (Shuls & Trivitt, 2015), teacher educator factors (Goodwin & Kosnik, 2013), and teacher education course offerings (Lazar, 2007). It is critical that teacher education programs provide PSTs with quality multicultural education instruction that helps them develop the beliefs, knowledge, and skills to effectively teach students from diverse cultural backgrounds (Gay, 2010). However, research reveals that although teachers benefit from learning their craft in teacher education programs, many novice teachers feel unprepared for the challenges they face as they enter diverse classrooms (Darling-Hammond, 2006).

Many white PSTs' beliefs about teaching diverse students are generated from the cultural and pragmatic experiences they bring to their teacher education programs (Kyles & Olafson, 2008). These beliefs about teaching diverse students influence how PSTs cognitively process their professional instruction (Pohan,1997; Kyles & Olafson, 2008) and engage in their teaching practicums (Richardson, 1996; Stuart & Thurlow, 2000). Many teacher education programs offer limited multicultural education learning opportunities, such as a stand-alone course on diversity or multicultural education (Sleeter & Owuor, 2011). As Ladson-Billings (1999) notes, the effectiveness of one course changing the beliefs or teaching practices of prospective teachers toward diverse students is significantly limited.

Background and Context

Mason University (a pseudonym), the focus of this study, is a small liberal arts university located in the American Midwest. Mason University Teacher Education's (MUTE) mission endeavors to prepare PSTs to influence culture as highly qualified teachers. The majority of PSTs enrolled in the MUTE program come from White, middle-class backgrounds. Of the factors presented in the literature review, multicultural education learning opportunities offered

in a teacher education program and PSTs' beliefs about diverse students are the most malleable. Therefore, the multicultural education instruction offered in the (MUTE) program and Mason University's (MU) PSTs' beliefs about diverse learners were investigated through a needs assessment.

The participants in the needs assessment revealed PSTs' unpreparedness to effectively teach students from diverse cultural backgrounds. Key findings from participant responses and document analysis of the MUTE program revealed important contributing factors for the problem of practice concerning PSTs' preparedness to teach reading comprehension to students from diverse cultural backgrounds. First, there is evidence from the needs assessment that the MUTE program does not provide adequate multicultural education instruction. In particular, the multicultural education instruction offered in the current MUTE program does not adequately prepare MU PSTs to recognize the need for students from diverse cultural backgrounds to engage in learning experiences that equip them to become self-directed learners. The program also does not equip PSTs with instructional strategies that encourage diverse learners to become independent learners and problem solvers. Second, Mason University (MU) PSTs do not recognize the importance of how a student's cultural background influences their knowledge construction and acquisition. The PSTs also do not embrace their responsibility to provide students from diverse cultural backgrounds with learning experiences that help them become self-directed learners or to equip students to think and problem solve on their own.

Infusing a Culturally Responsive Teaching Focus

In order to support PSTs' development of their knowledge, skill, and self-efficacy to teach reading comprehension to students from diverse backgrounds, culturally responsive teaching, an aspect of multicultural education, was infused in an advanced level reading methods

course. Culturally responsive teaching uses the cultural knowledge, background experiences, frames of reference, and performance styles of culturally diverse students to create learning opportunities that are more relevant and effective for them (Gay, 2002). Teachers who use culturally responsive teaching practices value students' cultural and linguistic capabilities and consider these knowledge resources as useable capital to enhance students' learning (Aceves & Orosco, 2014).

Grounded in sociocognitive learning theories, the construct of self-efficacy is derived from Bandura's (1986) perspective that motivation is mainly influenced by outcome expectations and efficacy expectations. For PSTs to effectively implement culturally responsive pedagogy in their teaching practicums, they need to feel efficacious in their ability to enact their culturally responsive teaching knowledge and skill in a classroom context (Fitchett, Starker, & Salyers, 2012). The construct of culturally responsive teaching self-efficacy is the practitioner's perception of their ability to effectively implement culturally responsive teaching practices to achieve positive student outcomes using this pedagogical approach (Siwatu, 2007). It is essential to help PSTs develop culturally responsive teaching self-efficacy because PSTs who showcase culturally responsive teaching self-efficacy are more likely to utilize culturally responsive teaching techniques and are more confident in their ability to work with diverse student populations (Siwatu & Starker, 2010).

Based on these theoretical and empirical foundations, 10 MU PSTs were provided with an intervention that taught them how to teach reading comprehension within a culturally responsive teaching framework. This intervention entitled the Culturally Responsive Reading Comprehension Instruction Intervention (CRRCII) contained the following components: 10 research-based instruction lessons on teaching reading within a culturally responsive framework,

12 field placement experiences in a diverse setting, and nine learning activities paired with critical reflection.

Study Design

This study included 10 White PSTs enrolled in an advanced level reading methods course in the MUTE program and used a convergent parallel mixed methods design. Data were collected from pre- and post-surveys, an observation checklist, focus group interviews, and reflection journals. Quantitative data were analyzed using descriptive statistics, t-tests, and McNemar's tests. Qualitative data were deductively analyzed using a priori codes.

Findings of Changed Knowledge, Skills, and Self-Efficacy

The study participants demonstrated growth in their knowledge to teach reading comprehension to students from diverse cultural backgrounds as a result of participating in the CRRCII. Preservice teachers also showed some significant changes in their skill to teach reading comprehension to students from diverse cultural backgrounds as a result of participating in the CRRCCII. In addition, PSTs provided evidence for significant changes in all four factors of self-efficacy to teach reading comprehension to students from diverse cultural backgrounds as a result of participating in the CRRCII. Qualitative evidence helps explain the quantitative findings and suggests that the PSTs found the research-based instruction, field experiences with diverse students, and learning activities paired with critical reflection helped them develop their knowledge, skill, and self-efficacy to teach reading comprehension to students from diverse cultural backgrounds. Going forward, the MUTE program will intentionally infuse culturally responsive teaching instruction in all of the methods courses.

Implications for Practice

This study indicated that engagement in research-based instruction on culturally responsive reading comprehension practices, field experiences with students from culturally diverse backgrounds, can positively influence PSTs' knowledge, skill, and self-efficacy in this area of interest. Therefore, the learning components of the CRRCII should be considered for inclusion in future teacher education reading methods courses as an approach to prepare PSTs to capably teach reading comprehension to elementary students from diverse cultural backgrounds.

Chapter 1

Introduction to the Problem of Practice

The purpose of this chapter is to provide a framework for understanding the factors that contribute to preservice teachers (PSTs)' preparedness to teach reading comprehension to elementary students from diverse cultural backgrounds. Using the theoretical lenses of ecological systems theory and sociocultural theory, the following factors will be explored in greater detail: (a) accreditation requirements (b) certification requirements (c) teacher educators (d) teacher education course offerings, and (e) PSTs' beliefs about teaching reading to students from diverse cultural backgrounds. Finally, the chapter concludes with a rationale for the selection of malleable factors of teacher education course offerings and PSTs' beliefs, knowledge, and skill as operationalized variables for the needs assessment study.

Problem of Practice

Most of the PSTs, in my professional context in the Mason University Teacher Education (MUTE) program in a midwestern state near the Great Lakes, come from White, middle-class backgrounds with limited exposure to people from diverse backgrounds both in their personal lives and their schooling experiences. Mason University (MU) PSTs often enter diverse practicum settings with altruistic ideals. However, they may not have adequately processed their underlying beliefs and perceptions about people from different cultures and may not have adequate preparedness to meet the learning needs of the diverse students in that setting. During lesson observation debriefings with me as their university supervisor, MU PSTs express feelings of apprehension about their preparedness to design and implement quality instructional experiences for diverse learners. As a result, they often intentionally gravitate toward the use of

simple instructional strategies that emphasize student recitation rather than the more desirable complex thinking from students.

Increasing Classroom Diversity

It is critical that PSTs develop the beliefs, knowledge, and skill to effectively teach students from diverse cultural backgrounds (Gay, 2002) because the American student population continues to become more diverse (NCES, 2017). In 2014 the U. S. Department of Education stated that for the first time in national history, there were more non-White students enrolled in kindergarten classrooms than White students (Howard & Rodriguez-Minkoff, 2017). The National Center for Education Statistics (NCES, 2017) projected that for the 2015-2016 academic year, U.S. public PreK-12 students would consist of 29% Latino, 15% African American, 6% Asian/Pacific Islander, 1% Native American, and 46 % White. However, the dominant population preparing to become teachers are from White, middle-class backgrounds who commonly have limited experience with people from other ethnicities or social classes (Benton–Borghi & Chang, 2012; Castro, 2010). As classrooms become more culturally diverse, many White PSTs enter their teaching practicums with a set of beliefs, knowledge, and pedagogical skills that may be a cultural mismatch for the diverse learners they teach (Castro, 2010). This cultural disconnect is highlighted in the problem of practice concerning PSTs' preparedness to teach reading comprehension to elementary students from culturally diverse backgrounds.

Teacher Beliefs and Knowledge Affects Instruction

Beliefs influence instruction. Preservice teachers' beliefs about students from diverse cultural backgrounds can limit the PSTs' abilities to recognize the unique gifts and challenges that students from culturally diverse backgrounds bring to the classroom (Castro, 2010). These

beliefs may include negative perspectives such as colorblindness, deficit views, or stereotypes. Beliefs such as these can influence PSTs' expectations for diverse students and curtail the rigor of the instruction they plan for them (Kumar & Hamer, 2012).

Knowledge influences instruction. PSTs' knowledge about how culture influences teaching and learning also influences their preparedness to effectively teach reading comprehension to students from diverse backgrounds (Lazar, 2007). Without an understanding of how culture influences learning and a recognition of the strengths that diverse students bring with them to the classroom, PSTs can misinterpret students from diverse backgrounds as dependent learners (Barnes, 2006). Preservice teachers may also need to better understand complex multicultural issues (Gay, 2010). For example, many PSTs lack an awareness of the influence that systemic injustices and social inequities have on learning for many diverse students (Cross, 2005).

Culturally Sensitive Reading Instruction

In order to effectively teach reading comprehension to students from diverse backgrounds, PSTs need to develop a specific set of pedagogical skills. They need to be able to teach research-based reading comprehension strategies in ways that value and build upon students' cultural and linguistic strengths as well as their current comprehension skill levels (Caughlan & Cushman, 2013). Reading instruction would include providing modeling and scaffolding for all students so they can become independent learners who can think critically, problem-solve, and read with high levels of comprehension (Gay, 2010; Hammond, 2015).

Increasing Preservice Teachers' Cultural Awareness

Preservice teachers' preparedness influences the interdependent outcomes of their performance during their practicum and the learning experiences of the students they teach

(Castro, 2010). Preservice teachers need to analyze their personal beliefs about students from diverse cultural backgrounds, teach in ways that support how students from diverse cultural backgrounds learn best, and critically reflect on the systemic injustices and inequities that students from diverse cultural backgrounds experience, or they may be promoting additional injustices and inequities instead of preventing them (Cross, 2005).

Theoretical Frameworks

This complex problem of PSTs' levels of preparedness to teach reading comprehension to elementary students culturally diverse backgrounds can be better understood through the examination of the multilayered ecological contexts and sociocultural theory. The ecological systems theory provides a backdrop of the systems within the study, and the sociocultural theory establishes how learning is rooted in a social context and is developed through experiences, dialogue, and social interactions with others (Vygotsky, 1978).

Ecological Systems Theory

The ecological systems theory holds that an individual person is situated in a set of inter-related nested systems (Bronfenbrenner, 1979). This theory can be leveraged to introduce and explain the significant factors involved in the preparedness of PSTs to teach reading comprehension to diverse elementary students in interdependent, nested levels including, chronosystem, macrosystem, exosystem, mesosystem, and microsystem. The chronosystem level refers to the influence on an individual's development of changes over time in the midst of the environment in which they live. An example would be how PSTs develop their beliefs about teaching reading as a result of experiencing years of reading instruction in their own primary school education (Ng, Nicholas, & Williams, 2010). The macrosystem level refers to aspects found at the level of culture, such as cultural norms and societal beliefs. An examination of the

historical context of literacy reveals deeply embedded societal ideals that promoted a deficit view of students from diverse cultural backgrounds (Gee, 2015) and supported outcome disparities that are highly correlated with skin color, ethnicity, language, and socioeconomic status (Carter & Welner, 2013).

The exosystem refers to the social settings that influence PSTs, but PSTs may not actively participate. One instance of this is how racism has been institutionalized in the American education system through policies and practices that create barriers for students from diverse cultural backgrounds (Bullock et al., 2014). The mesosystem refers to the interaction between two or more microsystems in which PSTs actively interact, such as the required college coursework PSTs are offered as a result of state certification requirements or the classroom environment that a teacher educator creates. The microsystem refers to interpersonal relationships and patterns of activities experienced by the PST during their professional learning. For example, PSTs' development of pedagogical skill to teach culturally diverse students are influenced by teacher educators' ability to provide supportive learning opportunities for PSTs. While the ecological systems theory provides a perspective on the underlying factors involved in PSTs' preparedness to teach diverse learners, the sociocultural theory provides an alternate lens for investigating how PSTs' preparedness to teach students from diverse cultural backgrounds is influenced by their environment. Together, the two theories provide perspectives that help educators better understand the problem.

Sociocultural Theory

The sociocultural perspective promotes that individuals create meaning through interactions with people in their environment in which both the culture and context of a learner play key roles in how learning occurs (Vygotsky,1978). For example, the learner experiences

meaningful learning when knowledge is filtered or passed on to them through different social representatives such as a peer group and in a specific cultural context such as a university classroom. Gee (2008) further explains that knowledge and learning in the sociocultural theory are more than representations in a learner's brain, but rather the learner's depth and breadth of knowledge and knowledge construction represent an interconnected relationship between the learner's mind and body and the environment in which the learner lives and functions.

From a sociocultural theory perspective, learning to teach occurs in a community of peers, which involves learning from and with other individuals. This learning happens through PSTs exchanging of ideas, articulating the reasons behind their instructional decisions, engaging in inquiry aimed at solving specific problems of practice, and reflecting on their teaching to improve student learning (Cochran-Smith et al., 2015). The community of practice that PSTs identify with, according to Thompson, Windschitl, and Braaten (2013), can influence their learning trajectory. Within this sociocultural view of PSTs learning, a variety of systemic factors ranging from state mandates to the culture of university classroom communities can influence PSTs' preparation for teaching (Daniel, 2016).

Conceptual Framework

These theoretical frameworks inform the conceptual framework, which describes the essential relationships among and between the factors that are connected to literacy instruction. These factors include teacher education program accreditation, teacher certification regulations, and teacher educators' preparation, knowledge, and quality.

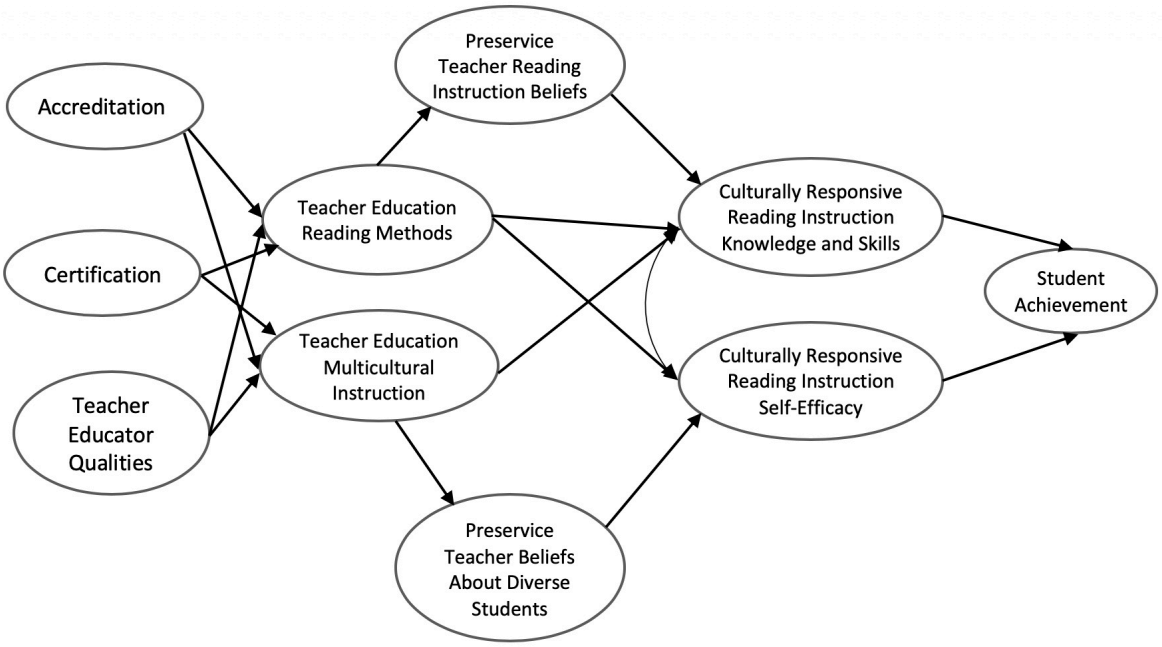

Figure 1. Conceptual Framework for Teacher Education and Preservice Teacher Beliefs Factors.

Teacher Education's Responsibility

Teacher education programs have an ethical responsibility to prepare teachers who can teach a wide range of students successfully (Taylor, Kumi-Yeboah, & Ringlaben, 2015). However, the field of teacher education as a whole has not always taken seriously its role in preparing PSTs to be critical inquirers or culturally responsive pedagogists (Cochrin-Smith, 2004a). There are a few promising programs, but most programs struggle to actualize in their PSTs the values and skill to effectively teach students from diverse cultural backgrounds (Zeichner, 2018). Strategies such as attention to underlying beliefs, specific agendas, support systems, and outcome measures show some promise to help PSTs become equipped to teach diverse learners effectively. These strategies need to be situated within the history of education.

Opportunity Gaps for Literacy Learning

Research reveals that although teachers benefit from learning their craft in teacher education programs, many teachers feel unprepared for the challenges they face as they enter diverse classrooms (Darling-Hammond, 2006). When teachers enter diverse classrooms with limited pedagogical skill and beliefs that students from diverse cultural backgrounds are not capable of learning at a high level, these PK-12 students often receive unstimulating, direct teaching with uninspiring, simplistic materials (Anyon, 2014; Darling-Hammond, 2006). Unprepared teachers have the potential to perpetuate the inequitable learning opportunities provided for students from racial minority and culturally diverse backgrounds.

Historical context. Bronfenbrenner describes the macrosystem as the overarching cultural and economic conditions within a society. Therefore, the historical lens provides a unique perspective. Historically, the American public school system has failed to provide adequate and equitable learning opportunities for students from diverse cultural backgrounds (Ladson-Billings, 2006: Skiba et al., 2008). Many of these policies, practices, procedures, and systems created barriers to learning and perpetuated racial biases and discrimination for racial minority students (Tate, 1997). In 1954 the Supreme Court unanimously ruled in the case of *Brown v. Board of Education of Topeka* that racial segregation of children attending public schools was unconstitutional. This decision required the United States to integrate schools and commit to providing quality education for all children regardless of race or culture. During this time, literacy outcome gaps between privileged children and children in poverty, as well as those between White children and children from racial minority backgrounds, became a prominent concern (Gee, 2015).

In the 1980s, literacy outcomes became a national focus once again when the report *A Nation at Risk* (National Commission on Excellence in Education, 1983) was published. This

report prompted interest in closing the literacy outcomes gap between children who were privileged and poor and between White majority students and students from racial minority backgrounds (Gee, 2015). The disparity between student literacy outcomes across racial and socioeconomic lines remained a national concern during the next two decades. In 2001, *No Child Left Behind* legislation was passed. An aspect of this legislation included holding public schools accountable to provide each child with effective literacy instruction.

In the current landscape in the second decade of the 21st century, the literacy outcomes gap between students of color from low-income communities and students from White privileged backgrounds are strikingly similar to what they were in the 1960s (Gee, 2015). The National Assessment of Educational Progress reveals that 12th-grade students from low-income families read four grade levels below their middle-class counterparts (Gorski, 2018). A close look at educational outcome disparities reveals that these disparities in reading performance are highly correlated with skin color, ethnicity, language, and socioeconomic status (Carter & Welner, 2013). Since the 1990's, there has been a movement to provide increased academic support and learning opportunities to students from low-income, minority backgrounds, but there are still barriers and inequalities due to the policies and practices in American public schools (Bullock et al., 2014). These barriers and inequalities are showcased by the fact that for many students who come from low-income racial minority backgrounds, the longer they stay in school, the greater the discrepancy between their educational outcomes and those of White middle-class students (Gay, 2002; Ladson-Billings, 2009).

Researchers posit that a major factor of the underachievement of students from racially, culturally, and ethnically diverse backgrounds is the divide between home and school culture (Griner & Stewart, 2012). Many students from diverse backgrounds struggle to make

connections to their learning like their classmates from the dominant, White middle-class culture (Griner & Stewart, 2012). Diverse students can also struggle to adapt to school procedures and expectations (Irvine, 1990). Another layer to the cultural divide is the cultural dissonance between teachers from White, middle-class backgrounds and students from diverse cultural backgrounds.

Cultural dissonance. In 2013, half of the nation's public-school students were African American, Hispanic, Native American, Asian, or two or more races (National Center for Education Statistics, 2017). In contrast, the majority of PSTs enrolled in teacher education programs come from White, middle-class backgrounds (Sleeter & Owuor, 2011). Cultural dissonance occurs when teachers from mainstream White, middle-class backgrounds mistakenly interpret or judge the actions or motivations of students from diverse cultural backgrounds because they do not take into consideration the influence of culture (Cartledge & Kourea, 2008). This dissonance is particularly true when teachers do not take into consideration embedded bias or prejudice in their worldview (Gay, 2002). There is a consensus from scholars, researchers, and policymakers that teacher education needs to address the potential for cultural dissonance between novice teachers and their diverse students (Banks, 2016; Gay, 2010; Lewis Chiu et al., 2017). However, there are conflicting views on how teacher education should accomplish this task.

Current Views on How to Prepare Preservice Teachers

Teacher preparation showcases Bronfenbrenner's mesosystem because it represents the many influences, and thus relationships that influence the policies and practices that drive teacher education programs. One prevalent and traditional view holds that in order to enhance teacher quality and preparedness, teacher education programs need to focus on addressing the

technical problem of training and testing PSTs in practices and policies that have proven effective in producing student outcomes. This view focuses on ensuring that PSTs have basic subject matter knowledge and that they have technical skills to support students' ability to perform sufficiently on standardized tests (Cochran-Smith, 2004b). Alternatively, many scholars view the problem not as a training and testing problem but as a learning problem and a political problem related to issues of equity and social justice (Cochran-Smith, 2004b; Gay, 2000; Ladson-Billings, 1999) This view is based on the premise that teaching is an intellectual, cultural, and a contextual act rather than a technical and neutral one (Cochran-Smith, 2004b).

Over the last two decades, there has been increased pressure on teacher education programs to restructure their programs to better prepare PSTs for teaching America's increasingly diverse populations (Sleeter & Owuor, 2011). Preparing PSTs to effectively teach an increasingly wider variety of ethnically, racially, and culturally diverse learners has shifted to become a critical focus of many teacher education programs (Yuan, 2018). Teacher education authorities such as Gay (2000; 2010), Banks (2002), and Cochran-Smith (2001; 2004b) posit that in order for teacher education programs to properly prepare PSTs to teach diverse learners, these programs need to equip PSTs to become culturally competent.

Increased Focus on Preservice Teachers' Cultural Competence

Cultural competence for PSTs in simple terms is the ability to competently teach students who come from background cultures that are different from their own (Diller & Moule, 2005). A more comprehensive definition includes developing knowledge and skill of culturally responsive teaching, awareness of underlying personal beliefs about people from different cultures, empathy towards students from diverse cultural backgrounds, and a social justice perspective (Banks & McGee Banks, 2013; Diller & Moule, 2005; Gay 2000; Ladson-Billings, 1999).

Awareness of how culture influences teaching and learning. Multicultural education scholars have persistently and passionately argued that PSTs should recognize how culture influences the teaching-learning process (Banks, 2016; Cochran-Smith, 2004b; Gay 2005) Typically, teacher education programs offer instruction in psychology, history, or sociology of education. Rarely do they offer instruction on anthropology (Ladson-Billings, 2006). If PSTs learn nothing about culture, they tend to misappropriate authority (use authority inappropriately) to use culture as an explanation for a wide variety of educational challenges. Culture, according to Ladson-Billings (2006), is often used by PSTs as a code word for difference. In her work with PSTs, Ladson-Billings (2006) found that the PSTs often attribute the difficulties they experience with a student as a problem of culture. The following excerpt showcases Landon-Billings' (2006) discovery concerning preserve teachers' misconception of culture in regards to student behavior.

> In a discussion with students who were completing their fourth field experience in our program, I listened as they described their students' misbehavior in terms of culture. "The black kids just talk so loud and don't listen," said one teacher education student. I asked her why she thought they spoke so loudly. "I don't know; I guess it's cultural." I then asked her if she thought they were talking loudly because they were black or because they were kids. She paused a moment and then said, " I guess I never thought about that" (p. 106).

Development of empathy. In order to effectively make personal and professional adaptations that support the learning outcomes of diverse learners, White PSTs need to develop and use the skill of empathizing with their students (Warren & Hotchkins, 2015). Empathy can be defined as the ability to comprehend and enter into another person's emotions or to experience something from another person's perspective (Coleman, 2009). Empathy can serve as

a mechanism to help White PSTs reconcile the disparity between the dominant perspectives of the majority of White U. S. population and the perspectives of students who have experienced oppressive social structures and inequitable opportunities (Warren & Hotchkins, 2015). If PSTs do not develop empathy for diverse students with a critical lens, they could develop false empathy. False empathy is a person's inclination to believe or act as if he or she possesses more empathy than can be validated by the beneficiaries or the outcomes of the empathetic response (Warren & Hotchkins, 2015). False empathy can be more harmful than no empathy because it can cause an individual to believe they realize more about the perspectives of marginalized people than they do. This false consciousness may then cause the individual to take actions that minimize a beneficiary's distress, promote more inequality, or misinterpret the wants and needs of a vulnerable party in a given interaction (Warren & Hotchkins, 2015).

Development of a social justice perspective. A critical aspect of PSTs' cultural competence is developing a social justice perspective that commits to providing rich and equitable learning experiences for all students (Cochran-Smith et al., 2009). A core of this social justice commitment is to teach in ways that enhance students' learning and their life chances. Teaching with a focus on social justice affirms and builds on students' strengths, promotes critical thinking, and maintains high expectations for each student (Kaur, 2012).

Teacher Education Factors

Teacher education programs need to provide explicit preparation for pre-service teachers to teach diverse learners (Darling-Hammond, 2006). Literature reveals there is a complex interplay of underlying factors that contribute to preparing teachers. In the following section, the teacher education related factors include accreditation requirements, licensure requirements,

teacher education program components offered, and teacher education faculty influence on PSTs' preparedness.

Accreditation Factors

National audit systems have emerged to help ensure that teacher education programs are preparing PSTs to teach effectively (Solbrekke & Sugrue, 2014). The teacher education accountability systems during the 2010s, which were mobilized by a perceived lack of public confidence, were layered over former accountability measures. The overlaying mixture of accountability measures created a complex and, at times, confusing environment for assessing the quality of teacher education programs (Cochran-Smith et al., 2018).

Between 1954 to 2013, a large teacher accreditation organization, the National Council for Accreditation of Teachers (NCATE), helped ensure that teacher education programs met the regulatory requirements and standards of the profession. In 2013, NCATE merged with Teacher Education Accreditation Council (TEAC), a smaller accreditation organization that was a competitor. The two accreditation organizations formed the Council for Accreditation of Education Preparation (CAEP), which is currently the principal accreditor of teacher education providers in the U.S. (Cochran-Smith et al., 2018). Amidst growing concern about the United States teacher quality and increasing apprehension about university teacher education programs' ability to produce competent teachers, the merger provided a unified structure to strengthen teacher education quality and improve teacher education program's assessment process (Cochran-Smith et al., 2018). CAEP created a data-centered accountability system built on the belief that more rigorous standards would highlight the differences between high- and low-quality teacher education programs, and to do that, they required an assortment of assessments

and outcome measures to evaluate graduates' performance and program performance (Cochran-Smith et al., 2018).

CAEP standards include requirements that emphasize the importance of institutions of higher education (IHEs) developing culturally competent teachers who help ensure the academic success of students from diverse backgrounds (Caepnet.org, 2020). In light of this, CAEP regulations include stipulations that diversity must be a prevalent attribute of a quality teacher education program (Caepnet.org, 2020). In their article describing CAEP expectations, Lewis Chui et al. (2017) report that the CAEP organization advocates that teacher preparation programs should infuse concepts related to diversity across all of their course content and field experiences (Lewis Chiu et al., 2017). The CAEP standards suggests that teacher education coursework should help PSTs examine the relationship between power and privilege in schools and that PSTs should work through their cultural background and biases (Lewis Chiu et al., 2017). The CAEP governing board also suggests that teacher education coursework should equip PSTs to infuse multiple perspectives in their teaching, plan instruction that builds on students' cultural strengths, and promote verbal and nonverbal communication skills that foster respect for diverse students and their families (Lewis Chiu et al., 2017).

Certification Factors

Historically, in the United States, each state government sought to improve the quality of its teacher workforce by regulating its certification and licensure requirements (Shuls & Trivitt, 2013). Shuls and Trivitt (2013) evaluated administrative data including teacher demographics, years of teaching experience, and licensure exam scores, and student achievement scores from the Arkansas Department of Education to examine the differences in student achievement between teachers seeking traditional and alternative licensure routes. Teachers, regardless of

their preparation route, who scored higher on the teaching content licensure exam, also had higher achieving students suggesting that teachers who know more content about teaching students in reading and mathematics are better prepared to enact what they know in the classroom. While the underlying logic of licensure requirements suggests that passing licensure exams would weed out individuals who would be of low quality from the workforce and allow individuals who would be effective teachers to enter the profession (Shuls & Trivitt, 2013), this study reveals the importance of not only passing, but passing with high scores because of the impact teacher's content knowledge has on student achievement (Shuls & Trivitt, 2013).

State policymakers who intend to ensure that teachers have an appropriate level of content knowledge in the subject they wish to teach and a minimum level of pedagogical knowledge, use licensure exams covering these basic areas. Prospective teachers need to demonstrate an appropriate level of knowledge by exceeding a required minimum cut score on these exams. The logic behind the use of cut scores suggests that a prospective teacher who did not pass the exam by one question is not fit to teach, while the prospective teacher who earns a score equal to the cut score deserves to enter the workforce as a teacher. Through the use of teacher licensure exams, states can prune out lower-performing novice teachers in terms of test performance. However, the licensure exam test scores provide scant information on the novice teachers' actual ability to teach students in the classroom (Shuls & Trivitt, 2013). Although, there is some evidence that the licensure exam scores can indicate the possibility of future performance (Shuls & Trivitt, 2013).

In a paper published in the Education Commission of the States (2015), Julie Rowland reported that a current trend in teacher certification is that states are requiring all early childhood and elementary PSTs to pass a reading-instruction-specific exam on the science of reading

instruction prior to licensure (Rowland, 2015). These exams address the science of reading instruction and are required for early childhood and elementary PSTs. The 14 states currently requiring this exam are expanding policies that hold teachers and teacher education programs accountable for students' literacy acquisition (Rowland, 2015). Rigorous, content-specific exams administered prior to licensure influence teacher-education programs to provide more transparency on current curricular components and commitment for continuous curricular improvements to help ensure that each graduate possesses the necessary skill to effectively teach reading (Rowland, 2015).

Teacher Educator Qualities

The quality and effectiveness of a teacher education program are largely influenced by the competence and expertise of their teacher education faculty (Goodwin & Kosnik, 2013). In their article, Goodwin and Kosnik (2013) address what teacher educators should know and how teacher educators should prepare for their instructional role. Near the beginning of their article, Godwin and Kosnick (2013) that due to the limited studies concerning teacher educators' knowledge and preparation, they draw from the work of international colleagues to present needed knowledge domains for teacher educators.

Learning to teach is a complex process that requires the acquisition of professional knowledge and specialized methods through a combination of prescribed study and apprenticeship (Cochran-Smith, 2004a; Darling-Hammond & Bransford, 2005). In order to help PSTs navigate the complex process of learning to teach, teacher educators need to develop the pedagogy of teacher education (Goodwin & Kosnik, 2013). A prominent authority on teacher education pedagogy, Loughran (2008), states that such pedagogy "involves a knowledge of teaching about teaching and a knowledge of learning about teaching and how the two influence

one another in the pedagogic episodes that teacher educators create to offer students of teaching experiences that might inform their developing practice" (p. 1180). Given the critical role that teacher educators play in preparing PSTs to teach a widely diverse student demographic, attention to teacher educators' preparation, knowledge, and quality is more important than ever (Goodwin & Kosnik, 2013).

Teacher educators' preparation. Most novice teacher education faculty receive limited professional development support as they enter the profession or while they are on staff (Cochran-Smith, 2003). With little in the way of professional preparation for this role, most novice teacher educators are left to invent their teacher education pedagogy on their own (Goodwin & Kosnik, 2013). Many novice teacher educators rely on their past experience in teacher education programs and the beliefs and experiences they developed during prior experience teaching in P-12 settings to help establish their professional methods (Goodwin & Kosnik, 2013). However, teaching PSTs how to teach requires teacher educators to restructure their mental framework with new understandings (Goodwin & Kosnik, 2013) If teacher educators do not actively make changes and carry out this reconstruction, there may be a disconnect between their teaching theory and the way they actually provide learning experiences for PSTs (Bullock & Christou, 2009). In her article, Cochran-Smith (2003) examines four teacher educator groups across their careers and in various school contexts. Cochran-Smith (2003) asserts that the education of teacher educators is enhanced when teacher educators use an inquiry framework to study teaching, schooling, and teacher education because the inquiry promotes an exploration of the successes and challenges within particular educational contexts.

During a self-initiated professional development in an IHE, seven novice teacher educators conducted a self-study to help them develop the pedagogy of teacher education. In this study, Grierson et al. (2012) used Loughran 's (2006) text entitled *Developing a Pedagogy of Teacher Education: Understanding Teaching and Learning about Teaching* to stimulate seven teacher educators' self-reflection and provide a framework for their once-a-month discussions. The researchers collected data from the discussion transcripts and administered two surveys, which were coded and categorized. The themes of teaching dilemmas and group process were identified. Grierson et al. (2012) found that reading the text and relating it to their own experience highlighted the complexities they faced learning the pedagogy of teacher education. The following statement came from Arlene, a participant and one of the seven researchers, in response to another study participant. Her statement highlights how challenging the development of the pedagogy of teacher education can be.

> . . . This may explain why many are unwilling to engage in self-study and expose their vulnerability through admitting that being a teacher educator is uncertain, complex, and imperfect, which is why we need to keep learning from and with one another. (Grierson et al., 2012, p. 95)

Examining the underlying beliefs, attitudes, assumptions, and biases inserted in their personal histories enables teacher educators to reduce the dichotomy between their theory and practice (Bullock & Christou, 2009). When teacher educators engage in a self-study such as the one above, they garner insights that can synthesize their theory of pedagogy and their educational practice (Loughran, 2007).

In their collaborative self-study, Bullock and Christou (2009), explored the process of two teacher educators re-constructing their professional identity. The teacher educators met

regularly for 90-minute time blocks over the course of an academic year to discuss how their instructional theories influenced their practice with PSTs. They used literature written by philosophers and teacher education practitioners as catalysts for their discussions. Through their disciplined analysis of the teaching and learning in their courses, both teacher educators realized that they needed to address the gap between what is taught and what is learned in their courses. They realized that in order to help PSTs make connections between the information presented in teacher education courses and their pedagogical development, both teacher educators needed to intentionally construct their theory on how students learn and what is the best way to teach them and then enact practice with deliberate pedagogical strategies based on that theory.

Grierson and colleagues, as well as Bullock and Christou (2009), recognized that they entered their teacher educator roles with limited professional preparation. Each set of researchers discovered they could improve their professional practice through collaborative professional learning. The teacher educators in each study were able to improve their professional practice by discussing professional readings on effective pedagogical techniques with colleagues and then applying the pedagogical techniques in their course contexts.

Teacher educators' knowledge. In order to prepare PSTs to teach diverse students, teacher educators need specialized knowledge (Goodwin & Kosnik, 2013). Teacher educators cannot teach what they do not know (Goodwin & Kosnik, 2013). Four prominent knowledge domains that teacher educators need to develop in order to prepare preserve teachers include personal knowledge, content knowledge, pedagogical knowledge, and sociological knowledge Goodwin & Kosnik, 2013).

Personal knowledge. Teacher educator's personal and autobiographical knowledge shapes their decisions, practices, and pedagogical choices (Goodwin & Kosnik, 2013). Beliefs

and lived experiences become foundations upon which teacher educators' teaching practice is built (Goodwin & Kosnik, 2013). Many teacher educators are from the traditional majority culture and lack experience working with diverse populations (Ladson-Billings, 2009). The large representation of faculty from the dominant culture influences what learning opportunities are offered in teacher education programs and how urgently the program promotes diversity and social justice (Sleeter, 2017). For example, a teacher education program with a high percentage of faculty from the dominant White culture is more likely to develop course work that reflects White sensibilities (Lin, Maxwell, Abe-Boone, & Zimmer, 2009).

In their study to investigate how institutional characteristics influenced the amount of diversity content in teacher education courses, Lin et al. (2009) found that faculty demographics influenced the type and amount of diversity learning opportunities offered in a teacher education programs. Data for the study were collected from the 2004 National Prekindergarten Center database. The researchers selected 416 bachelor degree programs that were not missing any data to use for their study sample. To examine the impact of geographical contexts, institutional characteristics, and program characteristics on the teacher education programs' coursework on cultural diversity, the researchers analyzed the data using bivariate and multivariate logistic regressions. The study found that none of the teacher education programs' geographical characteristics, institutional characteristics, or program characteristics were associated with cultural diversity course work with one exception. The exception was that in the program characteristics category, the presence of non-White full-time faculty was associated with coursework on cultural diversity. The study finding suggests that non-White faculty are more likely to address diversity issues in their coursework, whereas White faculty may be less

comfortable or undervalue the importance of addressing diversity issues in teacher education courses (Lin et al., 2009).

In addition to influencing program offerings and focus, White teacher educators' underlying assumptions influence how they help PSTs work through their underlying beliefs about teaching diverse students. In her inquiry study on how her teacher education pedagogy influenced the preparedness of PST to teach diverse learners, Cochran-Smith (2003) uncovered some of her own unidentified beliefs. In sharing about her developing awareness about her assumptions, she states

> I learned not only about how my students constructed the issues, but I also exposed the limits of my competence, the extent of my uncertainty, and the arrogance of some of my assumptions. In short, my own education as a teacher educator evolved with my ability and willingness to call into question not only my students' assumptions and practices, but also my own (p. 12).

Content knowledge. Teacher educators need to well-versed in the discipline of teaching (Loughran, 2006). They need to know the theoretical aspects of teaching and learning as well as the practical aspects of who PSTs are as adult learners (Loughran, 2006). The theoretical aspects of most teacher education programs include topics such as knowledge of classroom management, learning theories, and cooperative learning (Loughran, 2006). Knowing who PSTs are as learners involves knowing how they grow and develop and how their background experiences shape the way they perceive and practice teaching (Goodwin & Kosnik, 2013). Content knowledge provides a foundation for teacher educators to develop curriculum, make instructional decisions, and assess learning outcomes (Goodwin & Kosnik, 2013).

Pedagogical knowledge. In order to meet their responsibility to prepare PSTs to teach diverse students, teacher educators need to cultivate supportive pedagogical practices (Akiba, 2011). In her study to investigate which teacher education program components helped positively influence PSTs' beliefs about teaching diverse students, Akiba (2011) found that teacher educators' pedagogy was influential. The researcher collected data from two pre and post surveys given to 243 PSTs enrolled in eight sections of a teacher education diversity course with an accompanying field experience. The data analysis used ANOVA and regression analysis. The study findings revealed that in addition to engaging in field experiences, PSTs' beliefs about teaching diverse students were positively influenced by teacher educators' ability to develop a university classroom community, model constructivist philosophy, and model culturally responsive teaching.

Developing a classroom community. From a sociocultural perspective, in order to help PSTs prepare to teach diverse learners, teacher educators need to be able to create a university classroom environment where PSTs feel comfortable working together as a community to negotiate their newly formed understandings during their teaching and learning experiences (Brock, Moore & Parks, 2007). PSTs who engage in learning communities can shape the community and be shaped by the community to which they belong (Brock et al., 2007). As PSTs interact with members of their learning community, educational ideas and practices become more concrete (Brock et al., 2007). The details of the Brock study will be described later in the chapter.

The pedagogical method of creating a safe and collaborative learning environment is particularly supportive for PSTs learning to teach literacy to diverse learners (Brock et al., 2007). In her investigation to find out what educational components helped PSTs teach reading in a

culturally responsive way, Barnes (2006) found that the teacher educator's ability to create a safe and open classroom space was critical for PSTs' development. In Barnes' (2006) quantitative study of 25 PSTs enrolled in a beginning level reading methods course, the PSTs had two class periods per week of reading instruction and one class period per week of field placement where they tutored students from culturally diverse backgrounds. As part of the reading instruction, the professor explicitly taught and modeled effective reading strategies and pedagogy that supported the reading skill development of diverse learners. Barnes (2006) identified two key program components that supported PSTs' growth. The first component consisted of a field experience where PSTs engaged with teaching diverse students and then wrote reflections that allowed PSTs to process and confront their thoughts and beliefs and work through their developing understandings. Secondly, the professor intentionally provided a space where open and honest discussions about the deep issues of race and culture could take place.

The researcher also noted that growth in PSTs' beliefs about teaching diverse students developed slowly. The PSTs' growth was initially accompanied by frustrations by those who preferred to learn only the content of knowledge and pedagogy of reading instruction without the additional layers of learning about systemic injustices that students from diverse cultural backgrounds regularly experience. Barnes' (2006) study confirms that when teacher educators use innovative programming, as Cochran-Smith et al. (2015) suggests, PSTs can develop and use the skill of empathizing with their students (Warren & Hotchkins, 2015).

Modeling a constructivist philosophy. Effective instruction on how to teach requires a shift in focus from the curriculum to the learner (Korthagen, Loughran, & Russell, 2006). In their study, Korthagen et al. (2006), investigate how teacher education programs can support PSTs instructional development. The researchers' analyzed effective international teacher education

program factors and generated a framework of seven principles that can guide the development of effective teacher education programs that are responsive to the needs of preservice teachers to promote long-term success.

In order for PSTs to fully understand the dynamics of different teaching situations, teacher educators need to provide opportunities to comprehend what is involved in planning for teaching, doing the teaching, and reflecting on the teaching (Korthagen et al., 2006). PSTs need to link all of these teaching components to the relationship between teaching and concurrent learning (Korthagen et al., 2006). One way that teacher educators can provide PSTs with learning opportunities that help them experience how teaching practices can be constructed and deconstructed is inviting them to be a central part of the learning construction process (Segall, 2002). For example, instead of telling PSTs about a problem of practice, teacher educators can embed them in the problem-solving process (Korthagen et al., 2006). Experiential learning opportunities such as this can create powerful learning for PSTs as they work through the problem by linking their theory to practical experiences (Korthagen et al., 2006).

This constructivist teaching method is particularly helpful for PSTs learning to teach literacy to diverse learners (Brock et al., 2007). In Barnes' (2006) investigation to find out what educational components helped PSTs teach reading in a culturally responsive way, she found that the teacher educators' constructivist teaching methods were helpful for PSTs' development. In Barnes' (2006) quantitative study of 25 PSTs enrolled in a beginning level reading methods course, the professor explicitly taught and modeled effective reading strategies and pedagogy that supported the reading skill development of diverse learners. The professor also intentionally used problem-solving techniques that engaged the PSTs in the construction of their instructional understandings. In this study, PSTs participated in a variety of learning activities such as book

talks, creating an autobiographical poem, and self-reflection on their cultural competency. In addition, PSTs had an opportunity to apply their course learning during a field experience where they taught reading lessons to two culturally diverse students.

Barnes (2006) collected data from 25 PSTs' class discussions and weekly written lesson reflections. From analyzing this data, Barnes (2006) identified two key program components that supported PST's growth. The first component consisted of a field experience where PSTs engaged with teaching diverse students and then wrote reflections that allowed PSTs to process and confront their thoughts and beliefs and work through their developing understandings. Secondly, the professor intentionally included inquiry work and learning opportunities that encouraged PSTs to problem solve and engage in constructing their understanding of how to teach reading skills to students from culturally diverse backgrounds. However, a weakness of the study is that the researcher did not provide specifics about how she analyzed the data.

Some teacher educators use traditional instructional approaches that include lecturing about educational theory in courses that are disjointed from other courses or field experiences in the teacher education program (Korthagen et al., 2006). When teacher educators assume that they can merely tell PSTs how to teach and then send them off to practice what they have listened to, PSTs are ultimately unprepared for their profession (Korthagen et al., 2006). Scholars and researchers increasingly critique these types of traditional instructional approaches for their limited influence on PSTs' beliefs and practice (Korthagen et al., 2006).

Modeling culturally responsive teaching. Teacher educators who bear the responsibility of equipping PSTs to teach diverse populations must be able to effectively model culturally responsive teaching (Prater & Devereaux, 2009). Gay (2013) suggests that culturally responsive teaching in both idea and action should be shaped by the sociocultural characteristics of the

setting in which it occurs. Given this truth, she suggests that teacher educators provide learning opportunities where culturally responsive teaching methods are explicitly modeled and with opportunities for concrete application.

Sociological knowledge. In order to prepare PSTs to promote equitable learning opportunities for diverse students, teacher educators need to go beyond learning discrete subject knowledge or pedagogical knowledge to develop knowledge about the political, historical, and cultural knowledge concerning the diverse classrooms of today (Goodwin & Kosnik, 2013). In particular, teacher educators need to understand the role of race and racism in U.S. education (Warren & Hotchkins, 2015) Without a solid understanding of how racism impacts how teachers teach and how students learn, teacher educators may perpetuate racist norms. In the critique of his complicity to perpetuate racist norms in his position as a teacher educator, Fasching-Varner (2009) shared the following. "In preparing our future educators, mostly White, middle-class women, we reinforce, reinscribe, and make acceptable practices that further widen the gap between white and black students in k-12 settings" (p. 825). He then advocates that teacher educators should consciously and vigilantly develop their understanding of how race and racism are often institutionalized so they can conduct personal critiques as well as systemic and programmatic critiques of their professional context (Fasching-Varner, 2009).

Teacher Educators' Competence

Quality teacher preparation depends on the quality of teacher educators (Goodwin & Kosnik, 2013). The competence and expertise of teacher educators are very influential to the quality and effectiveness of teacher education programs; however, many IHUs pay limited attention to the quality of teacher educators' pedagogy (Goodwin & Kosnik, 2013). Professional

standards for teachers are quite specific and evident, but standards for teacher educators are broad and do not always represent a consensus in the field (Goodwin & Kosnik, 2013).

Currently, the most promising quality improvement for teacher educators' learning is carried out by teacher educators themselves as they engage in self-initiated professional development such as participation in self-studies, attending professional development courses, or engaging in collaborative studies (Cochran-Smith, 2003). In line with sociocultural theory, research reveals that one of the most effective methods for teacher educators to improve the quality of their teaching and learning is through inquiry within a learning community (Cochran-Smith, 2003). When teacher educators engage collaboratively with other teacher educators to inquire about assumptions, values, professional knowledge, practice, or student learning, they can make substantial professional growth (Cochran-Smith, 2003).

The complex interplay of the three teacher education factors of accreditation, certification, and teacher educator qualities influence the type and quality of teacher education programming. These three factors all play a role in the design decisions concerning the learning opportunities offered in a teacher education program. Institutionalized context influences how effective teacher education program meet their responsibility to prepare PSTs to teach in diverse classrooms (Cochran-Smith, 2004b) Programs that are simplistic, decontextualized, and lacking a cohesive focus struggle to produce thoughtful, adaptive advocates for students from culturally diverse backgrounds (Cochran-Smith, 2004b).

Teacher Education Learning Opportunities

There are varying convictions on how teacher education programs should design learning opportunities to instruct PSTs on how to teach diverse learners (Cicchelli & Cho, 2007), reflecting Bronfenbrenner's microsystem of influences upon the PSTs. Research has revealed

that knowledge of subject matter alone cannot prepare PSTs who predominantly come from White, middle-class backgrounds with limited knowledge about and experience with diverse students to effectively instruct students from diverse cultural backgrounds (Sleeter & Owuor, 2011). In alignment with Cochran-Smith et al.'s (2015) recommendation, teacher education programs need to provide learning opportunities in multicultural education, field experiences with diverse students, critical reflection, (Sleeter & Owuor, 2011) and reading instruction that emphasizes how to support diverse learners (Lazar, 2007) in order to prepare PSTs to teach reading comprehension to students from diverse cultural backgrounds.

Multicultural Education Learning Opportunities

Most teacher education programs responding to the challenge to prepare PSTs to teach diverse students offer some type of multicultural education course work (Cicchelli & Cho, 2007). There are debates about how to best design and administer multicultural education in teacher education programs (Cicchelli & Cho, 2007). Some argue for a separate course that focuses on the complex issues of multicultural education and provides the opportunity for focused study (Cicchelli & Cho, 2007). Others argue for integrating multicultural education tenets into all aspects of a teacher education program (Gay, 2005). In general, teacher education programs attempt to prepare their predominately White cohorts to teach racially and ethnically diverse students through a single multicultural education course with limited content and diverse field placements (Warren & Hotchkins, 2015). In Hollins and Guzman's (2005) review of 101 empirical studies of teacher education programs from 1980 to 2002, they found that teacher education programs offered a range of diversity learning opportunities focused on diversity from stand-alone courses to infusion of multicultural content throughout the program. As Ladson-

Billings (1999) notes, the effectiveness of one course changing the attitude or teaching practices of prospective teachers toward diverse students is significantly limited.

The studies reviewed by Hollins and Guzman (2005) reveal that PSTs who go through teacher education programs that only offer a stand-alone course on diversity often exit their program with unchanged beliefs (Hollins & Guzman, 2005). Limited transformation of core beliefs is particularly true for White, PSTs who enter programs with limited background experience and engagement skills with people from diverse cultures if the instructional course only offers subject matter without opportunities for reflection or field experience (Sleeter & Owuor, 2011). The common teacher education program practice of offering a single course on multiculturalism or diversity can marginalize the subject matter and reduce opportunities for application (Darling-Hammond, 2006).

In many cases, the multicultural education courses that teacher education programs offer are weak (Gorski, 2009). For successful implementation of multicultural education, Banks (2016) posits that the broad concepts of content integration, knowledge construction, equity pedagogy, prejudice reduction, and empowering school culture should be taught. In an analysis of 45 multicultural teacher education course syllabi, across 45 institutions, Gorski (2009) found more than half of the courses he analyzed stressed celebrations of differences rather than investigating systemic inequalities. The researcher investigated how the multicultural teacher education course syllabi conceptualized multicultural education through course descriptions, course goals, course objectives, and other descriptive texts. Only 29% of the syllabi examined by Gorski (2009) explored more comprehensive issues such as oppression, racism, and systemic power relationships. Gorski (2009) observed that although many of the syllabi did not seem to be

designed to prepare teachers to practice authentic multicultural education, they did seem to meet the NCATE accreditation standard for teaching with multicultural competence.

Similarly, Cochran-Smith and colleagues' (2015) review of research on teacher preparation for teaching diverse learners found similar limitations in teacher education multicultural education offerings. The researchers conducted a "massive review of research" (p.109) of field research from 2000-2012 on teacher education to identify, analyze, and critique the major programs in teacher education. Most of the studies examined revealed few innovative instructional methods. Although PSTs had opportunities to think about diversity in these courses, there was little evidence that PST shifted their perspective towards becoming more equity-minded or socially just teachers (Cochran-Smith et al., 2015).

Field experiences. For decades, scholars and researchers have promoted field experiences as an essential component of preparing PSTs to transfer their knowledge and skill gained from their university-based preparation to their teaching practicums (Cochran-Smith et al., 2015; Darling-Hammond, 2006; Grossman, Hammerness & McDonald, 2009). Field experiences can help PSTs prepare to implement what they have learned in their course work into authentic classroom contexts (Capraro, Capraro, & Helfeldt, 2010). Field experiences are defined as a variety of opportunities for PSTs to observe, assist, tutor, or instruct K-12 students in a classroom or community-based setting (Capraro et al., 2010).

Although field experiences have become standard practice for most teacher education programs, not all field experiences will help PSTs bridge the gap between their teaching theories and their actual practice (Korthagen et al., 2006). The learning that happens in field experiences is highly contextualized, so the quality of the field experience is essential. In order for field experiences to serve as a bridge between teaching theory learned in teacher education programs

and practical aspects of teaching, the field experience activities and practices that PSTs engage in should align with the theoretical and evidence-based practices taught in methods courses (Allsopp, DeMarie, Alvarez-McHatton & Doone, 2006). Also, the field experiences should be intentionally structured to include reflection and inquiry activities that help PSTs connect teaching theory with their classroom learning experiences (Capraro et al. 2010). Inquiry-based learning helps PSTs develop problem-solving skills and questioning practices as they actively engage in collecting evidence concerning the teaching and learning process (Capraro et al. 2010).

In their investigation of how different types of field experiences influenced PSTs' self-perception of their preparedness and competence to teach, Capraro et al. (2010) found one type of field experience to be more effective. The researchers conducted a study with 135 PSTs who were enrolled in the same methods course the semester before their student teaching. Each of the three sections of the course had a different type of field placement including, control (business as usual), professional development school (PDS), and inquiry-based school. All of the PSTs had the same course assignments. However, there were three different field experience requirements. In the PDS group, PSTs also attended faculty meetings and professional development opportunities for the teachers in the school. PSTs in the inquiry-based group engaged in inquiry projects where they implemented inquiry-orientated strategies and procedures. The researchers analyzed the collected data from a readiness survey given at the end of the semester through the use of confidence intervals for each group. Study findings revealed that the inquiry group had consistently higher self-reported ratings when compared to the other two groups. The findings of the Capraro (2010) study suggest that structured field experiences that include inquiry learning methods help PSTs prepare to teach more effectively.

Many teacher education programs offer no field experiences with students from diverse cultural backgrounds, or they offer brief field experiences with limited and unstructured engagement with diverse students (Sleeter, 2008). These types of field placement offerings produce little change in PSTs' beliefs, cultural sensitivities, knowledge about cultures, or knowledge of supportive pedagogical skills for diverse learners (Sleeter, 2008). When PSTs receive limited hands-on experience teaching diverse students, they often feel unprepared to teach students from diverse backgrounds after they graduate (Sleeter & Owuor, 2011).

Critical reflection. A key role of a teacher education program is to help PSTs engage in critical reflection as they analyze their positioning and beliefs as well as consider societal systemic structures (Sleeter & Owuor, 2011). Honest self-reflection and self-evaluation of personal beliefs, behaviors, cultural patterns of communicating, cultural knowledge, and systemic injustice and inequities are imperative components of cultural competence growth (Gay & Kirkland, 2003). Self-reflection and self-evaluation of these critical components can help PSTs acknowledge how their worldview shapes beliefs about themselves, the students they teach, and systemic societal structures (Sleeter, 2001). Thinking through their own beliefs, as well as the complexities of multicultural issues, can be challenging for PSTs. Thus, guided opportunities to critically reflect on their beliefs, multicultural course content, and their multicultural learning experiences in field placements is important for their growth in cultural competency (Sleeter & Owuor, 2011). Reflections on learning experiences deepen understandings and assist PSTs with growing their knowledge and adjusting their thinking (Richardson, 1990). This kind of cognitive growth in cultural competency can equip PSTs to bridge the cultural gap between themselves and the diverse students that they teach (Schon, 1983).

Teacher education programs need to support PSTs' critical reflection, particularly about the systemic injustice and inequities that students from diverse cultural backgrounds experience (Cross, 2005). Furthermore, teacher education programs that offer only multicultural content instruction, and possibly field placements in a diverse setting, but do not address and help PSTs reflect upon issues of racism, power, and Whiteness may actually promote racism instead prevent it (Cross, 2003). Even if teacher education programs make progress in some areas, but stay silent on the inequities and injustices that manifest from inequitable power systems, then PSTs will likely enter the field with the same silence and thereby miss an opportunity to truly be effective teachers of diverse students (Cross, 2003).

In a case study with 12 recent teacher education graduates, Cross (2003) investigated if the participants' professional instruction on teaching diverse students in their teacher education program prepared them for their current teaching positions. The participants, who were teaching in a highly diverse classroom context in the Milwaukee Public Schools, were interviewed, and the data collected were coded and analyzed for themes. The study results revealed that the novice teachers could state some goals of a culturally competent teacher such as respecting a student's language, using diverse and representative curriculum materials, and acknowledging that students come to the classroom with usable background knowledge. However, none of them described themselves as active agents of social justice. Instead, these students simply made small modifications to the typical curriculum with a few cultural changes.

The instruction on systemic injustice and inequities must not be shallow or focus just on an individual's perspectives or on the experiences of just one race as these limiting instructional foci could have negative consequences such as confusion or more deeply embedded racism (Mason, 2016). In Mason's (2016) qualitative study, the grounded theory approach was used to

investigate PSTs' transformation of core beliefs about racism. In this study, three White PSTs, who entered the program with very little background knowledge about people from various backgrounds, made a significant transformation in their core beliefs. For instance, Mason shared that one PST entered the program with a light-hearted attitude that did not take the work of becoming a socio-politically conscious educator very seriously. However, as the student participated in classroom assignments, discourse, and reflections, this student demonstrated a deeper desire to become a critical educator and shared insights that revealed more profound thoughts and understandings on integrated multicultural education concepts. Mason attributed the transformative growth of the PSTs to the program's provision of time and support for PSTs to authentically and deeply reflect upon and work through their racialized selves in relation to schools and society. The program support included extensive course time dedicated to guided reflection and discourse on multicultural issues (e.g., racial injustice, inequitable learning opportunities, embedded bias), beliefs (e.g., meritocracy, prejudice), and the importance of change (e.g., curriculum evaluation, school procedure evaluation). Though Mason's study had only three participants, the findings contribute evidence that intentional instructional practices such as guided reflection can help PSTs prepare to teach diverse students.

Though leading multicultural education scholars argue for the need to provide PSTs with substantial multicultural education instruction (Banks, 2016; Gay, 2010; Ladson-Billings, 1995), there is a lot of variation of multicultural education implementation in and across teacher education programs (Hollins & Guzman, 2005; Sleeter & Owuor, 2011). Many teacher education programs limit multicultural education instruction to one stand alone course without an accompanying field experience (Sleeter & Owuor, 2011). In many instances, the multicultural

education course offered does not provide substantial instruction or critical reflection opportunities (Gorski, 2009).

Reading Instruction Learning Opportunities

In order to prepare PSTs to teach literacy to diverse learners, reading instruction courses need to not only address the fundamentals of reading instruction but also help PSTs alter their perspectives on two key issues. First, novice teachers may view students from diverse cultural backgrounds from a deficit perspective (Lazar, 2007). Second, novice teachers may hold a misconception that reading comprehension methods and strategies can be taught and are learned in a decontextualized manner without thought given to the uniqueness of the learning context and the children with the context (Erickson & Shultz, 1992). If novice teachers are to provide literacy instruction to students in ways that address each student's specific strengths and needs, these teachers need to select appropriate instructional strategies and methods and develop the ability to adjust and adapt them as daily learning unfolds in the classroom (Brock et al., 2007).

Effective teachers of reading are "knowledgeable, strategic, adaptive, responsive, and reflective" (International Reading Association, 2003, p. 1). In order to learn and apply these skills with culturally diverse students, PSTs need specific instruction and modeling in culturally responsive reading instruction (Lazar, 2007). In short, PSTs need to learn the content of teaching reading as well as how to translate that knowledge into effective reading instruction for a diverse class of students (Hollingsworth, 1989). Three interwoven knowledge bases can help PSTs grow in their effectiveness as culturally responsive reading instructors: the content-specific theory and pedagogy for teaching reading; the skill of reflecting upon and adapting instruction according to the needs of the learner; and the sociocultural influence on learning (Hollingsworth, 1989).

The content of reading comprehension instruction. The foundation of reading instruction is thinking (Stauffer, 1969). To comprehend a text, a reader must actively construct meaning. The act of making meaning is influenced by both the text and the readers' prior knowledge (Cain, 2010). As previously mentioned, Bui and Fagan (2013) found that in a study with 49 fifth graders that students who were taught cognitive strategies within a culturally responsive teaching framework made the most progress in their reading comprehension. The teacher who used the culturally responsive framework valued and built on students' past experiences. The importance of a readers' background knowledge has implications for teaching reading to diverse learners whose experiences and context may differ from students from the mainstream culture (Bui & Fagan, 2013).

Instruction in metacognitive strategies is particularly effective for diverse learners who bring a variety of different background knowledge and learning preferences to the reading tasks (Dickenson, Collins, Simmons, & Kameenui, 2016). Metacognition is the knowledge of and self-monitoring of one's thinking and learning process (Bruning, Schraw, & Norby, 2011). Teachers who teach reading must be able to teach students how to comprehend a text using a variety of metacognitive reading strategies such as summarizing, questioning, and predicting (Iwai, 2016). This instruction includes being able to articulate both what is required for a student to comprehend a text and how the student can comprehend the text (Sterzik & Fraser, 2012).

Equipping learners to monitor their thinking and comprehension with the strategy of metacognition is powerfully effective (Flavell, 1979). According to Flavell (1979), this metacognitive monitoring process involves four components: metacognitive knowledge which involves the learner's comprehension of and beliefs about the interactive factors of the cognitive process; metacognitive experiences which involve the learner's awareness of where they are in

the learning process and what kind of progress they are making; metacognitive goals which involve the metacognitive cognitive focus areas that the learner strives towards; and metacognitive actions which involve the learner's applied strategies to accomplish their metacognitive or cognitive goals. In order to help students develop these cognitive skills, it is vital to equip students with self-awareness and self-regulatory skills to enable them to be strategic and reflective thinkers (Bruning et al., 2011).

Thus, it is essential for PSTs to be knowledgeable about pedagogy that helps readers think about how they are processing the messages of the text and what strategies they can use to complete the thinking tasks required. In particular, in order to support the reading outcomes of diverse learners, it is important for PSTs to learn effective research-based reading strategies that build on students' cultural strengths (Lazar, 2007).

Reflection on reading instruction theory and pedagogy. Not only is it essential to help PSTs develop expertise in reading instruction pedagogy, but it is also essential to help them develop the skill of metacognitive reflection so they can be thoughtful and adaptive as they are teaching. Some of this self-reflective knowledge can be taught during coursework. Field placement experiences can extend this learning process as PSTs have the opportunity to monitor their thinking as they teach and make instructional decisions in response to how the student or students respond to the instruction (Griffith, 2017).

One way to help PSTs develop the culturally responsive reading instruction components of adaptiveness and responsiveness is to provide them with direct instruction and application opportunities to monitor their thinking while they are teaching reading (Lazar, 2007). An example of providing a learning opportunity for PSTs to reflect on the instructional practices actively is found in Griffith's (2017) study with 97 PSTs attending a university in the southwest

of England. During the course classes, Griffith (2017) taught the three steps of in-the-moment instructional decision making. First, Griffith (2017) explicitly modeled how to keenly observe students while they were reading. Then, Griffith (2017) modeled how to analyze the students' answers and artifacts. Following that, she modeled how to make instructional decisions based on the students' responses. Next, the PSTs went out to field placements to apply their instructional strategies with students. After each field experience, PSTs were asked to write about their in-the-moment instructional decisions. Griffith (2017) found that 88% of the PSTs were able to make in-the-moment decisions to adjust their instruction to better support the learner. For example, PSTs were able to provide comprehension support, motivation and encouragement, decoding strategies, and explanation of vocabulary words. This type of metacognitive monitoring helps PSTs develop their adaptive expertise (Griffith, 2017). It is not enough for PSTs to be able to state their teaching practices, they need to be able to problem-solve during instruction, so they can teach reading in ways that adapt and respond to students' learning needs (Griffith, 2017).

Classroom context. In order for PSTs to develop comprehension instruction skills, they need to be taught how to create a supportive classroom context (Lazar, 2007). In particular, PSTs need to be taught instructional strategies that value and use the cultural background that each student brings with them to the classroom (Lazar, 2007). From a sociocultural theory perspective, reading acquisition occurs as a mode of social collaboration and cognitive processing where collaboration occurs between students and teachers as well as peers (Perry, 2012). Special consideration should be given to ways in which the student uses language in their everyday life. Students' prior knowledge, combined with the use of language, collectively gives the student a cultural framework. The classroom context should support students' learning by

using cultural references and finding and creating instructional techniques that recognize and incorporate the students' home literacy practices (Perry, 2012).

Similarly, teacher educators should intentionally develop a classroom context for PSTs to develop their reading instruction pedagogy. In a case study that investigated PSTs' growth in providing supportive contexts for students from diverse cultural backgrounds course, Brock et al. (2007) found the classroom learning environments influenced PSTs' development. Seven participants, self-selected into two teams, were chosen for the study out of the 23 PSTs enrolled in a literacy methods course. The researchers chose to focus on two specific learning teams, team one and team two, because of their varying abilities to enact the course literacy components in the practicum. This case study approach examined the thirty-minute debriefing session after the practicum experience. The data sources for this study included field notes from class sessions, lesson plans, written reflections, and formal interviews. The researchers analyzed the data through inductive coding and identifying themes. The responses of the PST teams who received the same literacy instruction in their course and were conducting their lessons in the same practicum were remarkably different. Results revealed that the members of team one adaptively implemented specific literacy strategies based on formative assessments, and they provided a learning context that valued and built on their students' strengths. Team two struggled to adapt their literacy instruction and were frustrated that students in their practicum did not meet their academic expectations. Faced with these extreme differences in the results, Brock et al. (2007) sought to explain why the two groups responded so differently to the same contexts. They determined that the participants' characteristics varied in age and background for each team. The researchers also determined that they should have intervened to help team two develop a more collaborative community that focused on adapting to and considering the needs of their learners.

Preservice Teacher Factors

PSTs' beliefs about diverse students influence their ability to effectively teach students from culturally diverse backgrounds (Kahn, Lindstrom, Murray, 2014). This influence occurs while PSTs cognitively process their professional instruction (Kyles & Olafson, 2008) and during their teaching practicums (Richardson, 1996; Stuart & Thurlow, 2000). The definition of beliefs, according to Richardson (2003), is "psychologically held understandings, premises, or propositions about the world that are felt to be true" (p. 2). PSTs' beliefs about teaching develop from their personal background experiences, experiences they have had or observed in schools and educational instruction, and experiences with professional instruction and academic knowledge (Richardson, 2003).

Beliefs Developed from Personal Background Experiences

The cultural and pragmatic experiences that many White PSTs bring to their teacher education programs influence their beliefs about diverse students and how to best instruct them (Kyles & Olafson, 2008). Typically, PSTs' life experiences are steeped in cultural and historical contexts that influence the formation of their beliefs about themselves in relation to others, about how schools function in society, and about people from cultures different from themselves (Kyles & Olafson, 2008). PSTs have lived and engaged in several cultural communities before entering their teacher education programs. A cultural community could be designated based on the PST's race, ethnicity, socioeconomic status, or language, or it could be chosen based on personal interests (Kumar & Hamer, 2012). Culturally constructed images, patterns, and values, many of which PSTs are often unaware of, arise from their experiences in these cultural communities and contribute to their belief formation (Kumar & Hamer, 2012).

Many White PSTs who come from a monocultural background often need to be supported to consider their cultural identity, which is typical for members of a privileged majority group (Sleeter, 2001). They may have little awareness of how privilege has operated in their lives by being situated in a social position that provides unearned positive outcomes, dispensations, and advantages (Milner, 2010). Furthermore, they may not realize the social inequalities that occur in American society based on race and ethnicity because they have never been subjected to them (Ukpokodu, 2002). When White privilege is all they have experienced, White PSTs may not view themselves as having a culture. Instead, they may assume that their cultural views and experiences are the norm for all people regardless of race (Castro, 2010). This lack of understanding of complex multicultural issues can contribute to White PSTs' structural beliefs such colorblindness, meritocracy, individualism, stereotypes, deficit views, and prejudices against students from racial minority backgrounds (Castro, 2010).

Colorblindness. Colorblindness, according to Neville, Lilly, Duran, Lee, and Browne (2000), is based on the belief "that race should not and does not matter" (p. 60). In Blaisdell's (2005) work with an unspecified number of White in-service and PSTs, the teachers' beliefs about the meaning of colorblindness were described as variable, with each practitioner giving slightly different shades of meaning to the term. However, most teachers mistakenly agreed that colorblindness included not seeing race and attempting to treat White and Nonwhite students equally and with a sense of fairness (Blaisdell, 2005). An ethnographic research method employed by Schofield (1986) studied colorblind racial attitudes in a school that had been recently desegregated. In the study, colorblindness was defined as "a point of view which sees racial and ethnic membership as irrelevant to the ways individuals are treated" (p. 232). Three interconnected demonstrations of colorblindness were ascertained in the classroom contexts that

were studied: perceiving race as an invisible attribute, perceiving race as an unmentionable topic, and perceiving students' lives as a collection of individual experiences. Schofield (1986) shared that racial differences between students must be taken into account, or privileges and disadvantages that are associated with races will be ignored, and discrimination may occur. In addition, when teachers adopt a colorblind belief system, they are not viewing the wholeness of the student, which can cause the student's academic performance to suffer (Milner, 2010).

Meritocracy and individualism. Similar to colorblindness, the belief in meritocracy and individualism ignores aspects of racism and embedded institutional inequity (Castro, 2010). The ideology of meritocracy holds that each student has the same opportunities to succeed in school and that their success can be determined by their choices, abilities, and efforts (Wang, Castro, & Cunningham, 2014). The related ideology of individualism suggests that students are responsible for the success of their learning outcomes, regardless of their family background, cultural knowledge, and other accessible personal resources (Wang et al., 2014). Both meritocracy and individualism ideologies are deeply embedded in the concept of the American Dream, which promotes that in American society, each person has an equal opportunity to succeed. In reality, however, educational and life opportunities are not equal nor equitable for people from racial minority backgrounds (Milner, 2010).

The cultural ideologies of meritocracy and individualism can create barriers for PSTs to understand the complex systems of racial and cultural inequities (Wang et al., 2014). In their study to investigate if PSTs' individualism and colorblindness beliefs predicted their cultural diversity awareness, Wang et al., (2014) conducted regression analysis on data collected from 239 White PSTs survey data. The PSTs filled out four surveys while enrolled in a required diversity course including the Color-Blind Racial Attitude Scale (Neville et al., 2000), Cultural

Diversity Awareness Inventory (Henry, 1986), Almost Perfect Scale -Revise (Slaney, Mobley, Trippi, Ashby, & Johnson, 1996), and Individualism-Collectivism Scale (Triandis, 1995). The study findings revealed that PSTs dispositional factors such as individualism and colorblindness predict lower levels of cultural diversity awareness. Wang et al.'s findings add to Blaisdell's (2005) and Schofield's (1986) studies on colorblindness but add additional nuances by blending PSTs views of individualism and colorblindness.

Milner (2010) suggests that if PSTs do not work through the ideologies of meritocracy and individualism, they could be less able and willing to recognize institutional and societal barriers that students from racial minority backgrounds encounter. Instead, PSTs may be tempted to lay the blame for academic struggles on the students themselves, viewing them as unmotivated or nor working hard enough (Milner, 2010). In their study to investigate how 15 PSTs developed awareness of students from diverse backgrounds, Mueller and O'Connor (2007) found that even after a semester of studying how institutionalized inequalities influenced the learning opportunities of students from diverse backgrounds, the majority of White PSTs involved in their study still held deeply entrenched beliefs of meritocracy and individualism. The researchers collected data from surveys, autobiographies, written narratives, and transcripts from interview data. Data were coded both deductively and inductively to identify themes. The study findings highlight that beliefs such as meritocracy and individualism can be challenging for PSTs to eliminate even after they have had specific instruction on how these beliefs allow blame to be placed on oppressed people groups instead of recognizing the roles of institutionalized practices that marginalize students from racial minority backgrounds.

Stereotypes. A stereotype is "an exaggerated belief associated with a category" (Allport, 1986, p. 191). Viewing people stereotypically assumes that each person belonging to that group

shares a particular characteristic (Allport, 1986). Amos (2011) conducted a study with 23 male and 31 female White PSTs enrolled in teacher education courses at a university in a rural area of the Pacific Northwest. Data were collected from self-analysis papers, reading reflection papers, and an observational journal. The data were thematically coded and then grouped into data categories for further analyses. The findings from this study found that most White PSTs in this study tended to view students from diverse backgrounds as a group and associated them with negative racial stereotypes such as "ignorant and lazy" (p. 484).

Deficit views. A defect view perspective about a student's performance in school shifts the blame of a student's academic challenges onto the student and their background factors (Howard, 2010). These views assert that students from culturally diverse backgrounds bring a set of problems that have to be dealt with and contain negative conditions that have to be fixed instead of viewing the students as having resources that can be tapped to support their academic success (Howard, 2010). For example, if the student is not performing well, the blame is put on the student because of something they lack. Tied to the deficit view of students from diverse backgrounds is the belief that mainstream or White, middle-class ways of being, thinking, and communicating are considered "normal," and deviations from these ways are considered inferior (Howard, 2010).

Baldwin, Buchanan, and Rudisill (2007) studied 41 PSTs from predominantly White, middle-class backgrounds, as they took part in a service-learning program with elementary students from diverse cultural backgrounds. For many of the PSTs, it was their first experience in a context where they were working with students from diverse backgrounds. The qualitative data collected from interviews and written reflections revealed that many of the PSTs entered the program with deficit beliefs about the students with whom they worked. For example, similar to

Wang et al.'s (2014) findings, PSTs in Baldwin et al.'s (2007) study held deficit views about diverse students before they entered the program. Specifically, the PSTs in Baldwin et al.'s (2007) study viewed the students as lacking in intelligence, difficult to work with, hard to motivate, and from backgrounds that were lacking in resources. However, the service-learning experience empowered many of PSTs to begin deconstructing their deficit views and constructing higher expectations of students from different cultural backgrounds.

Prejudice. Similarly, prejudice holds negative views of students from diverse cultural backgrounds. Specifically, prejudice can be defined as a negative judgment about someone without sufficient basis in fact (Allport, 1986). Prejudice can be directed at a group of people, or it can be directed at an individual who is a part of a group (Allport, 1986). Prejudice can be demonstrated by PSTs when they underestimate students' abilities simply because they are associated with a particular ethnic group, even though the PST has no experience with or evidence of a student's academic ability. Lazar (2004) conducted a qualitative study to examine 32 PSTs' attitudes toward teaching literacy skills to elementary students in a low socio-economic status, urban community. Data collected from surveys revealed that many of the PSTs initially held negative judgments about the students they were assigned to work with. For example, PSTs initially predicted that African American elementary students who attended an urban school would be less interested in reading books, less proficient in oral communication, less likely to read at grade level, and less likely to be able to think creatively or critically than White students who attended a suburban school.

Preservice teachers can also hold stereotypical assumptions about students that may lead PST to engage in unequal treatment of students, which in turn can lead to unequal access to quality educational opportunities (DeCastro-Ambrosetti & Cho, 2011). In their study to

investigate PSTs' prejudices, DeCastro-Ambrosetti and Cho (2011) found that stereotypical assumptions about students could influence PSTs' expectations for students from different racial backgrounds. They gave 226 secondary PSTs a survey with eight photos of students from each of the four racial groups: Black, White, Asian, and Hispanic. Underneath the photos, there were a series of provocative statements. For instance, one statement asked the participants to identify which student they thought would most likely commit a felony before they graduated from high school. Participants were asked to link statements to each photo. The participants' responses were analyzed and coded for themes. The findings showed that the PSTs in this study held deeply preconceived notions about students from each racial background. For example, most PSTs selected students from minority backgrounds (with the exception of Asian students) as the most likely to have negative attributes such as behavior issues or low academic scores.

Many White PSTs who enter their teacher education programs with limited knowledge about diverse people may hold negative beliefs about teaching students from diverse cultural backgrounds (Kyles & Olafson, 2008). In a study frequently cited in the literature, the authors investigated how teacher education instructional approaches influence PSTs beliefs about teaching diverse students (Causey, Thomas, and Armento, 2000). The researchers found that most of the 24 PST's in the study initially described themselves having limited encounters with diverse people and had reservations teaching students who were different from themselves. Causey et al. (2000) collected data from PSTs' course assignments while they were enrolled in a course on diversity. The assignments included pre-and post-essays, reflection journals, and diversity plans. The researchers inductively coded the data and identified patterns and themes. The study findings revealed that most of the PSTs initially described themselves as having a "naïve egalitarianism" (p.36). The PSTs believed that each student entered the classroom with

equal opportunities to learn regardless of the type of instruction that was used. The PSTs also held stereotypical and deficit views of students from diverse backgrounds. However, as a result of experiencing the course lectures, reading the literature, and engaging in an internship in an urban school, the PSTs developed new insights about themselves and students from diverse cultural backgrounds. The researchers concluded that engaging with diverse students during the internship had the most influence on PSTs beliefs about teaching diverse students.

To gain more clarity on which instructional approaches helped influenced PSTs long-held beliefs about students from diverse cultural backgrounds, Causey et al., (2000) extended their study to conduct two case studies three years after the original study. The researchers gathered study data on Susan and Gloria, from interviews and classroom observations. The data were inductively coded, and themes were identified. The findings revealed that though Susan had restructured her beliefs about teaching diverse students at the end of her teacher education program, over her first three years of teaching, she reverted to beliefs that included stereotyping and social-class bias against diverse students. In contrast, Gloria had restricted her thinking on diversity during her teacher education program and continued to see herself as a "change agent" (p. 41). The researchers posit that the study results support teacher education programs need to provide quality learning experiences over several semesters in order to help PSTs restructure their belief schemata on teaching diverse learners.

Many White PSTs enter their teacher education programs with culturally constructed images, patterns, and values from a privileged background (Kumar & Hamer, 2012). With White privilege as their norm, PSTs may assume that their cultural views and experiences are typical for all people regardless of their background (Castro, 2010). This naive understanding of multicultural issues can contribute to White PSTs' structural beliefs such a colorblindness,

meritocracy, individualism, stereotypes, deficit views, and prejudices against students from racial minority backgrounds (Castro, 2010).

Influences of Preservice Teachers' Beliefs

PSTs' beliefs influence how they process their professional instruction (Pohan, 1996), their view of students' literacy potential (Lazar, 2007), and the instructional choices they make (Liang & Zhang, 2009). If PSTs are unable or unwilling to recognize their negative beliefs about race and culture, they are likely to be unable to provide an equitable learning environment for the variety of students in their classrooms (Alerman, 1991).

Processing professional instruction. PSTs' beliefs can affect how they process their professional learning opportunities. Many PSTs use the personal beliefs they bring to their program as a type of inflexible filter. They tend to use their prior education experiences to confirm what they already believe instead of allowing their new learning to help them confront or correct their beliefs (Kagan, 1992). Pohan (1996) conducted a study with 492 PSTs to identify factors related to growth in cultural sensitivity and awareness perspectives. Using two surveys, Pohan (1996) gathered data on PSTs' personal beliefs about diversity and PSTs' professional beliefs about diversity. Analyses of the data revealed that there was a strong connection between PSTs' personal beliefs and professional beliefs. For example, Pohan (1996) noted that PSTs who came into a program with deficit views or stereotypes of students of color were less likely to develop professional cultural competency skills from their professional instruction.

View of students' academic potential. PSTs' negative beliefs about students from diverse cultural backgrounds can influence their ability to work with diverse students effectively because their beliefs influence the academic expectations they have for these students (Kahn et al., 2014). In turn, having lower expectations for students from diverse cultural backgrounds

could influence PSTs to partake in inequitable practices such as lower quality of relationships with students, simplistic lessons, assessment bias, and the degree to which they support and encourage students (Sleeter & Owuor, 2011).

Instructional choices. The beliefs that PSTs hold about diversity influence the instructional choices they make for these students (Liang & Zhang, 2009). For example, if PSTs believe that students from diverse cultural backgrounds are lacking in cognitive ability or have a deficit in some way, the teachers are more likely to make unfavorable judgments about the students' abilities. Lacking faith in the student's abilities potentially lowers academic expectations and results in the choice of less rigorous and more rigid learning experiences (Castro, 2010). Using a sequential study design Kumar and Hamer (2012) examined 784 White PST's attitudes and beliefs toward student diversity. Data were collected using pre and post surveys, course data from courses in multiple semesters, and four rounds of student teaching practicums. The results of the study suggested that PSTs with strongly negative views of students from low income or minority backgrounds were more likely to use more performance-focused teaching techniques that rank students from best to worst based on normative criteria and PSTs who held less negative and stereotypical views were more likely to use adaptive instructional techniques to meet the individual needs of the students.

Similarly, Kyles and Olafson (2008) found that PSTs beliefs about teaching diverse students that influenced their instructional decisions. Kyles and Olafson (2008) conducted a mixed-methods study with 15 PSTs enrolled in a practicum experience in a diverse school setting. Data were collected from surveys and participants' reflective response letters. The surveys include three pre- and post-tests: the Hope Scale, the Motivation for Teaching Scale, and the Teacher Efficacy Scale, as well as two surveys given at the end of the semester: The Personal

Beliefs about Diversify Scale and The Professional Beliefs about Diversify Scale. The researchers analyzed the quantitative data using paired t-tests and the qualitative data by inductive coding and identifying themes. The quantitative study findings revealed no significant changes in PSTs beliefs about teaching diverse students throughout the semester. However, analysis of the qualitative data revealed that students (*n* 5) who had experienced additional multicultural education learning experiences or diverse life experiences incorporated more multicultural education into their teaching practices. Whereas, those students (*n* 10*)* without additional multicultural education experiences had a more difficult time recognizing the value of multicultural education practices. Kyles and Olafson (2008) argue that teacher education programs should provide PSTs with multicultural-infused instruction across the program to give them repeated and continued opportunities to develop their beliefs about teaching diverse learners.

The beliefs that PSTs hold about diverse learners influence many aspects of their learning and their teaching (Kyles & Olafson, 2008). In particular, PST's beliefs about diverse learners influence how they process their professional learning (Pohan, 1996), view students' academic potential (Kahn et al.,2014), and select instructional methods (Kumar and Hamer (2012). If PSTs' hold negative beliefs about teaching students from diverse cultural backgrounds, they may struggle to provide diverse students with equitable learning experiences (Kyles & Olafson, 2008).

Conclusion

In summary, several complex factors help explain the problem of practice concerning PSTs' preparedness to teach reading comprehension to elementary students from culturally diverse backgrounds. A review of the literature reveals a complex interplay of teacher education

factors and PSTs beliefs. The teacher education factors include accreditation (Brabeck & Koch, 2013), certification (Shuls & Trivitt, 2013) teacher educator factors (Goodwin & Kosnik, 2013) and teacher education course offerings (Lazar, 2007). Whereas the PSTs beliefs are comprised of PSTs beliefs about teaching diverse students that influence how they cognitively process their professional instruction (Pohan,1997; Kyles & Olafson, 2008) and engage in their teaching practicums (Richardson, 1996; Stuart & Thurlow, 2000). It is critical that teacher education programs help PSTs develop the beliefs, knowledge, and skill to effectively teach students from diverse cultural backgrounds (Gay, 2010). However, research reveals that although teachers benefit from learning their craft in teacher education programs, many teachers feel unprepared for the challenges they face as they enter diverse classrooms (Darling-Hammond, 2006). Accreditation and certification requirements, as well as teacher educator factors, influence the type and quality of multicultural education instruction that is offered. Of the factors presented in the literature review, multicultural education learning opportunities offered in a teacher education program is the most mailable. Therefore, the multicultural education instruction offered in the Mason University teacher education (MUTE) program and Mason University's (MU) PSTs' beliefs about diverse learners will be reviewed.

Chapter 2

Needs Assessment

As the literature revealed, both teacher education program multicultural education offerings and PSTs' beliefs influence PSTs' preparedness to teach learners from culturally diverse backgrounds. PSTs have experienced several cultural communities before entering their teacher education programs (Kumar & Hamer, 2012). Culturally constructed images, patterns, and values, many of which PSTs are often unaware of, surface from their experiences in these cultural communities and contribute to their beliefs about diverse students and how to best instruct them (Kumar & Hamer, 2012; Kyles & Olafson, 2008). Many White PST's enter their teacher education programs with inappropriate structural beliefs such a colorblindness, meritocracy, individualism, stereotypes, deficit views, and prejudices against students from racial minority backgrounds (Castro, 2010). Also, many PST's enter their professional program believing strongly that the same "good" pedagogy is equally effective for all students (Causey et al., 2000). PSTs who progress through teacher education programs that offer limited multicultural education, such as a stand-alone course on diversity, often exit their program with unchanged beliefs about teaching diverse learners (Hollins & Guzman, 2005). Limited transformation of principal beliefs is particularly true for White, PSTs who enter programs with limited background experience and knowledge about people from diverse cultural backgrounds (Sleeter & Owuor, 2011). If PSTs do not work through their personal beliefs about students from culturally diverse backgrounds, teach in ways that support how students from culturally diverse backgrounds groups learn best, and critically reflect on the systemic injustices and inequities that students from racial minority backgrounds experience, they may be promoting additional injustices and inequities instead of preventing them (Cross, 2005).

Context of the Study

My professional context is the Mason University (a pseudonym) teacher education (MUTE) program with PSTs. Mason University is a small liberal arts university located in the Midwest. MUTE's mission endeavors to prepare PSTs to influence culture as highly qualified teachers. The majority of PSTS enrolled in the MUTE program come from White, middle-class backgrounds. The MUTE program encourages PSTs to experience a diverse placement during their Teacher Assistant practicum (TAP) and student teaching practicums. However, PSTs are allowed to request placements in schools with students from primarily White, middle-class backgrounds

Statement of Purpose

Research into the underlying factors of the preparedness of PSTs to teach reading comprehension to elementary students from culturally diverse backgrounds is critical. PSTs' preparedness influences their beliefs about the students, the level and type of expectations they have for the students, how they relate to the students, and the rigor of the learning experiences they plan for the students (Lazar, 2007). Students should receive quality instruction on reading comprehension skills and strategies because reading comprehension is a foundational skill for many other subject areas (Gee, 2015). It is crucial for students to develop reading comprehension skills and strategies so that they can access information from informational texts about other subjects (Gee, 2015).

The purpose of this needs assessment is to ascertain if there are areas of need in the preparedness of Mason University (MU) PSTs to teach students from culturally diverse backgrounds as well as to identify if there are gaps in service of the multicultural education offered in the Mason University Teacher Education (MUTE) program. This study will

investigate the amount of multicultural education opportunities offered in the MUTE program through document analysis of course syllabi and field placement lists. This study will also investigate MU PSTs' beliefs about teaching students from culturally diverse backgrounds as well as their perceptions about their multicultural education experiences from the MUTE program with the use of a survey. This needs assessment is important because PSTs' preparedness contributes to the interdependent outcomes of their performance during their practicum and the learning experiences of the students they teach (Castro, 2010).

Research Design

In order to investigate my two research questions, I used a concurrent mixed methods design that included collecting quantitative and qualitative data simultaneously using a survey and document analysis. The purpose of designing a mixed-method study was to ascertain a more complex understanding of MUTE's multicultural offerings and MU PST's beliefs about culturally diverse students. The use of mixed methods methodology provided a means to investigate aspects of MUTE's multicultural offerings and MU PST's beliefs from several different vantage points (McKim, 2015). Combining deductive analysis of statistical data and inductive analysis of contextual data provided breadth and depth to the analysis process as well as provided additional evidence to support the validity to study findings (McKim, 2015). The following sections will describe how the needs assessment was conducted, including a description of the participants, measures, data collection, and data analysis.

Research Questions

This needs assessment will investigate two key factors involved in PSTs' preparedness to teach students from diverse cultural backgrounds. The first factor is the amount and type of multicultural education offered by a teacher education program, which research shows influences

PSTs' preparedness to teach students from diverse cultural backgrounds (Hollins & Guzman, 2005; Sleeter & Owuor, 2011). The teacher education programs who offer comprehensive multicultural education learning experiences across the program are the most effective at preparing PSTs to teach students from culturally diverse backgrounds (Sleeter & Owuor, 2011) and field placements associated with courses as well as extended field placement practicums where PSTs have the opportunity to actively engage with teaching students from racial minority backgrounds (Hollins & Guzman, 2005; Sleeter & Owuor, 2011).

The second factor includes PSTs' beliefs about students from culturally diverse backgrounds. PSTs can hold negative perceptions about students from diverse culturally backgrounds such as colorblindness (Blaisdell, 2005), meritocracy (Wang, Castro, & Cunningham, 2014), individualism (Mueller and O'Connor, 2007), stereotypes (Amos, 2011), deficit views (Baldwin et al., 2007), and prejudices (DeCastro-Ambrosetti & Cho, 2011). Each of these beliefs can significantly influence how PSTs process their professional education (Kagan, 1992; Pohan, 1996), view the academic potential of the students they teach (Kahn et al., 2014), and select the type of instructional methods used (Kumar & Hamer, 2012).

The following two research questions guided the needs assessment study to investigate these two key underlying factors for PSTs' preparedness to teach students from diverse cultural backgrounds.

- What multicultural education instruction have PSTs received on how to use effective instructional strategies to support learners from diverse cultural backgrounds?
- What beliefs do White PSTs have about students from culturally diverse backgrounds?

Participants

The population of participants for the study included 14 PSTs in the MUTE program who had completed their student teaching practicum during the spring semester of 2019. This was a convenience sampling because this group of PSTs had both recent experiences with course content and field experience offered in the MUTE program. The participants in the study included one male and 13 female White, PSTs from middle-class backgrounds who were between the ages of 21 and 24 years old. This demographic information was self-reported

Participants were recruited with an email by the MUTE placement officer three weeks before their student teaching practicum was scheduled to finish. PSTs were given directions to print off, fill out, and return two email attachments to the MUTE placement officer by April 27, 2018. The attachments included the consent letter and the Preservice Teacher Belief Survey. The response rate was 100%. Ten PSTs turned in both completed forms by the due date. A reminder email was sent out to the remaining four PSTs. Three PSTs turned in both forms by May 1, 2018. The remaining PST returned the forms on June 1, 2018. Approval was granted per Mason University and Johns Hopkins University IRB requirements on April 12, 2018.

Measures and Instruments

Measures of multicultural education instruction. The construct of multicultural education can be defined as professional instruction on how to: (a) embed cultural examples and cultural references into subject area instruction, (b) help students understand how cultural frameworks affect the construction of knowledge, (c) reduce prejudice, (d) modify pedagogy to support the needs of diverse learners, and (e) understand systemic injustices in schools (Banks, 2016). A key aspect of each of the five components of multicultural education is to teach PSTs how to use targeted instructional strategies to support the learning needs of students from diverse

cultural backgrounds. Banks (2016) promotes that multicultural education must teach students critical thinking skills and equip students to think for themselves. Hammond (2015) emphasizes the importance of teaching culturally diverse students self-directed learning techniques. Therefore, multicultural instructional strategies can be defined as techniques that help students from diverse cultural backgrounds become self-directed learners or equip them to think and problem solve on their own (Gregory & Chapman, 2013). To investigate the type and amount of multicultural education offerings in the MUTE program, MUTE course syllabi and field placement lists were collected and analyzed.

Document analysis of course syllabi. **E**ach of the 38 MUTE program course syllabi was examined to assess the number of course objectives and required readings listed concerning multicultural education topics. A course objective or required reading qualified as focusing on a multicultural education topic if the content or title addressed the same criteria described in the measures of multicultural education instruction.

Document analyses of MUTE program field placement lists. The MUTE program utilized 31 total field placements. Twenty-five were used for the teacher assistant practicums (TAP), and 16 were used for student teaching. This analysis examined the entire list. Mason University teacher education program field placement lists were analyzed for the student demographics of each of the schools that MUTE PSTs are placed in for their teaching practicums. In the MUTE program, PSTs are placed in two teaching practicums. First, PSTs are placed in TAPs. These semester-long practicums consist of aiding in a classroom for a minimum of ten hours a week. During a TAP practicum, PSTs engage in a variety of activities ranging from teaching whole class lessons to clerical work. Secondly, PSTs are placed in a student teaching practicum. During this practicum, PSTs take increasing responsibility for orchestrating

learning experiences for a classroom of learners over a semester. Each school listed on the field placement charts was examined for the number of enrolled students who qualified for free and reduced lunch and the number of students from racial minority backgrounds.

Measure of preservice teachers' beliefs. The construct of teachers' beliefs can be defined as the "psychologically held understandings, premises, or propositions" (Richardson, 2003, p. 2) about the students from racial minority backgrounds that teachers believe to be true. These beliefs could include propositions concerning students' skin color, values, personality, language use, socio-economic status, patterns of interaction, and attitudes about students from racial minority backgrounds. The variable of Mason University PSTs' beliefs about students from racial minority backgrounds and multicultural education offered in the MUTE program were measured with Preservice Teacher Beliefs Survey which was comprised of 28 items from the Henry's, Cultural Diversity Awareness Inventory (CDAI) and five open-ended questions (See Appendix A).

Henry (1995) developed the Cultural Diversity Awareness Inventory (CDAI) to measure the construct of teachers' beliefs about students from culturally diverse backgrounds. The CDAI relies on a five-point Likert-style scale (strongly agree to strongly disagree) to assess beliefs about cultural diversity, cross-cultural communication, and cultural issues in the classroom environment. The reliability of the CDAI was reported at 0.66 in a test-retest (Henry, 1995). This score provides evidence of instrument stability over time. Also, the Cronbach's test of internal consistency administered on the CDAI showed an alpha coefficient of 0.90. This assessment has been used by several other researchers (Brown, 2004; Deering & Stanutz, 1995; Larke, 1990). Some sample items from the survey include:

- I believe my culture to be different from some of the children I serve.

- I believe I would prefer to work with children and parents whose culture are similar to mine.
- I believe I am uncomfortable in settings with people who exhibit values and beliefs different from my own.

The five open-ended questions listed below were added to the Preservice Teacher Beliefs Survey to gather additional contextual data about the PSTs' personal experience concerning their multicultural education instruction for teaching students from diverse cultural backgrounds and are aligned to the research question: What multicultural education instruction have PSTs received on how to use effective instructional strategies to support learners from diverse cultural backgrounds?

Do you feel prepared to teach students from diverse cultures? Why or why not?

- Describe an assignment or an activity from one of your teacher education courses that best prepared you to teach students from diverse backgrounds.
- Name two strategies that you have used that supported the learning of students from diverse cultural backgrounds.
- What goals do you have for teaching culturally diverse learners?
- What advice would you give to the Mason University Teacher Education program regarding ways to help PSTs feel prepared to teach students from culturally diverse backgrounds?

Table 1

Operationalization Chart

Construct	**Definition**	**Indicator**	**Citation**
Multicultural Education	Professional instruction on a) How to embed cultural examples and cultural	Document Analysis of	Banks, J. A. (2016). *Cultural diversity and education: Foundations, curriculum, and*

Construct	Definition	Indicator	Citation
	references into subject areas instruction b) How to help students understand how cultural frameworks affect the construction of knowledge c) Reduction of prejudice d) How to modify pedagogy to support the needs of diverse learners e) Understanding of systemic injustices in schools (Banks, 2016).	MUTE Course Syllabi Document Analysis of Field Placement Charts	*teaching* (6th ed.). New York: Routledge.
Beliefs	These are "psychologically held understandings, premises, or propositions about the world that are felt to be true" (Richardson, 2003, p. 2).	Survey	Richardson, V. (2003). Preservice teachers' beliefs. In J. Raths & A. McAninch (Eds.), *Teacher beliefs and classroom performance: the impact of teacher education* (pp. 1-22). Greenwich, CT: Information Age Publishing.

Data Collection

There were three separate data collections in this needs assessment. The first two sets of data collection occurred through document analysis, and the second collection occurred through the use of a survey.

Course syllabi collection. On April 12, 2018, I met with the teacher education department chairman, who approved my request to analyze the syllabi from each of the 38 courses in the MUTE elementary and secondary programs. I read and analyzed each syllabus to determine the number of course objectives, number of course objectives concerning multicultural education, the number of course readings, and the number or course readings concerning multicultural assignments. I recorded each of these elements for each course, revealing how each

course aligned to the criteria as well as the overall totals for each element for the MUTE programs. I further analyzed the course syllabi to determine if the course had a field placement associated with the course. The field placement options for coding included no field placement, field placement with students from racial minority backgrounds, or field placement with students who are not from racial minority backgrounds.

Field placement data collection. I analyzed the field placement for the name and address of each school that was used for a practicum. I used field placement school websites, and the website Greatschools.com (Guide Your Child, 2018) to gather the following data: school type, percentage of students who qualified for free and reduced lunch, and percentage of students from racial minority backgrounds.

Survey data collection. The MUTE Placement Officer emailed the Preservice Teacher Beliefs Survey to study participants three weeks before their student teaching placement ended. Participants were invited to fill out the survey and return it to their supervising professor during their exit interview.

Data Analysis

The analysis was conducted from three different data sources. The data concerning MUTE program offerings were collected from the document analysis of MUTE course syllabi and MUTE field placement charts. The data concerning PSTs' beliefs were collected from the Preservice Teacher Beliefs Survey. Data from all three sources were imported into SPSS. Mean, median, and mode were calculated for each of the data sets. Then descriptive tables were created for the variables of multicultural education offered in the MUTE program and PSTs' beliefs about teaching students from racial minority backgrounds. An analysis was then conducted on the data represented on the descriptive tables to identify key findings of the variables.

Findings and Discussion

Key Findings Concerning Multicultural Education Instruction

Several key findings arose from the data collected to answer the research question, What multicultural education instruction have PSTs received on how to use various instructional strategies to support learners from diverse cultural backgrounds? Analysis of the data collected from the document analysis on MUTE course syllabi, the document analysis of the MUTE field placement lists, and the data collected from question number 31 on the Preserve Teacher Belief Survey (See Appendix A) indicate that there is a gap in service of the MUTE program's multicultural education coursework offerings. Specifically, MU PSTs are not receiving adequate multicultural education instruction on how to use instructional strategies to support the learning of students from diverse cultural backgrounds. This lack of instruction suggests that PSTs will not know how to adjust their instructions so that they are equipping students from culturally diverse backgrounds to think critically about new content and develop new problem-solving skills. They are not taught how to identify and build on students' strengths or taught how to create learning environments that are supportive of diverse learners.

The MUTE program offers limited multicultural education opportunities. The document analysis of the MUTE program course syllabi revealed that the bulk of multicultural education instruction occurs in one two-credit course entitled Diverse Populations, which has no accompanying field placement for students to apply their learning. Three other courses offer limited additional multicultural education. As can be seen in figures 2 and 3, out of 37 courses, nine courses had one multicultural education objective, and one course had 15 multicultural course objectives. Similarly, as can be seen in figures 4 and 5, out of 37 courses, eight courses had one required reading concerning multicultural education, once course had two readings, and one course had

13 readings These data indicate that most of the instruction MU PSTs receive in how to use various instructional strategies to support learners from diverse cultural backgrounds are covered in a two-credit course with a few additional learning experiences in alternate courses. Also, only one course offers an accompanying field experience with students from racial minority backgrounds. This course is only taken by MU PSTs who are enrolled in the reading instruction minor program.

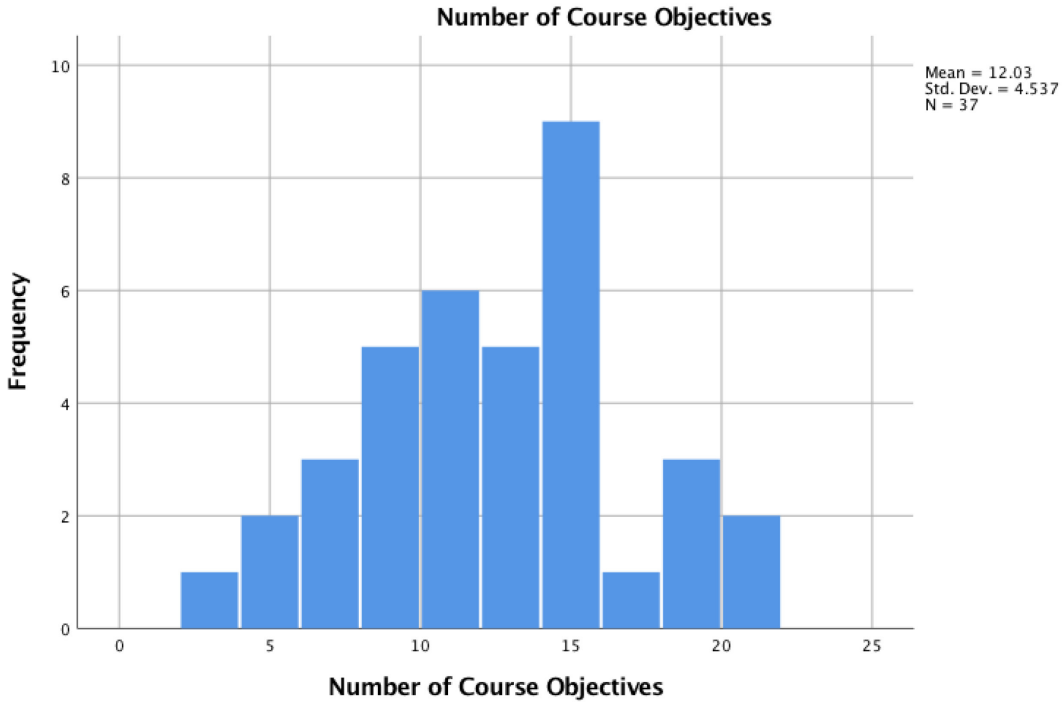

Figure 2. Distribution of Course Objectives for Each Course in the Mason University Teacher Education Program.

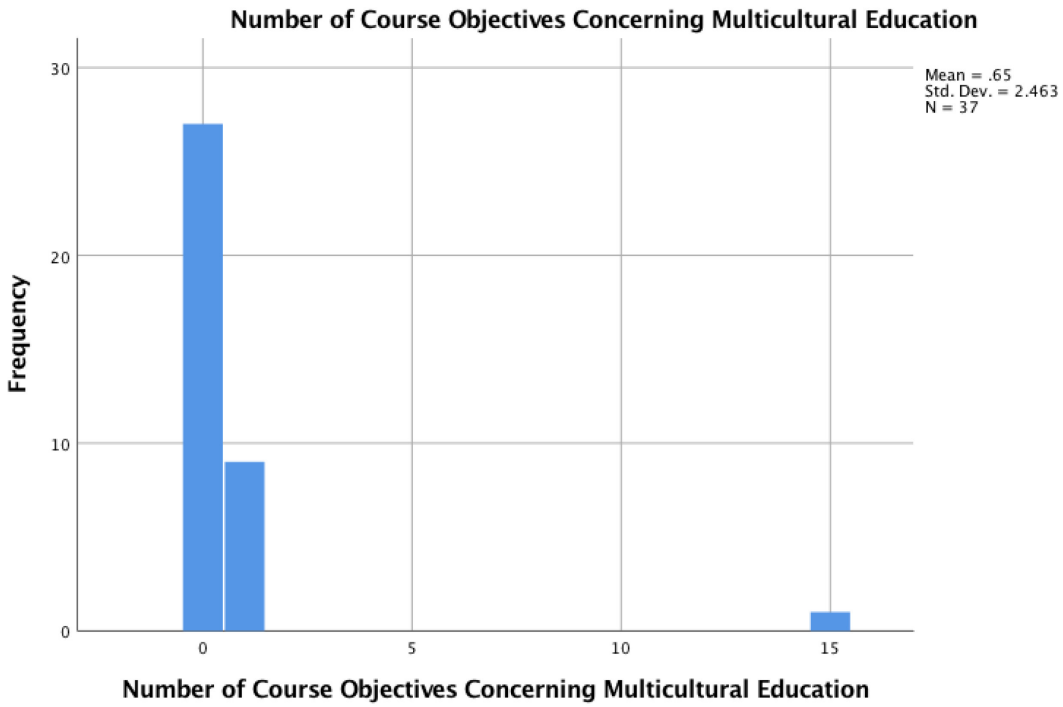

Figure 3. Distribution of Course Objectives Concerning Multicultural Education Instruction for Each Course in the Mason University Teacher Education Program.

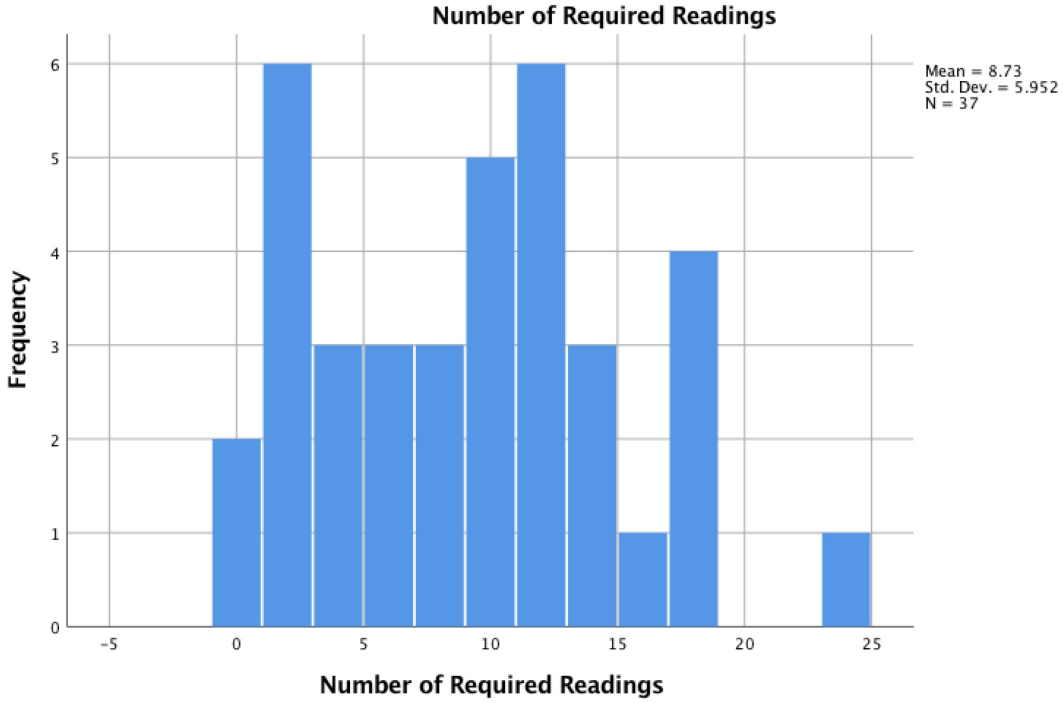

Figure 4. Distribution of Required Readings for Each Course in the Mason University Teacher Education Program.

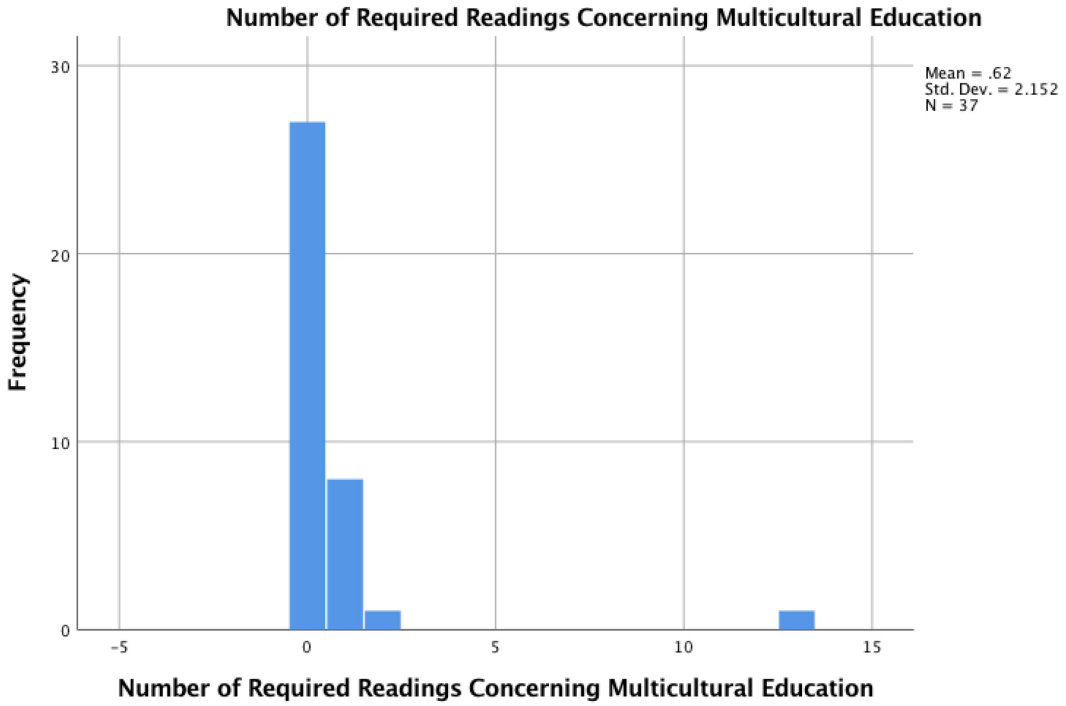

Figure 5. Distribution of Required Readings Concerning Multicultural Education Instruction for Each Course in the Mason University Teacher Education Program.

The results of the limited multicultural education instruction on how to utilize multicultural instructional strategies to support students from culturally diverse backgrounds offered by the MUTE program is evidenced in PSTs' survey responses. MU PSTs were asked to name two instructional strategies they have used to support the learning of students from culturally diverse backgrounds. Instructional strategies can be defined as techniques that help students from diverse backgrounds become self-directed learners or equip them to think and problem solve on their own (Gregory & Chapman, 2013). Of the 28 strategies that were listed by the MU PSTs, only one of them was a technique that would help students from diverse backgrounds become self-directed learners or equip them to think and problem solve on their own (Gregory & Chapman, 2013). This technique, submitted by participant 12, stated: "I use product differentiation to allow

students to choose the best way to show their knowledge" (2018). Other strategies offered by PSTs included structural components or surface types of responses such as "talking about different cultural foods" (Participant 8, 2018), "using hands-on activities" (Participant 4, 2018), or by "building relationships with parents" (Participant, 2, 2018). These could be important ideas, but PSTs did not make the connection that a strategy equips students to process information and problem solve on their own.

In contrast to the limited multicultural education instruction that MU PSTs receive during their coursework, many of them are placed in practicums where they have the opportunity to work with students from diverse cultural backgrounds. For student teaching placements for the 2017/2018 school year, PSTs were placed in 31 schools. The average school demographics for placements include 50.68% students from racial minority backgrounds and 59.24 % students who qualify for free and reduced lunches For teacher assistant practicum placements for the 2017/2018 school year, the average school demographics for placements include 49.20% of students from racial minority backgrounds and 59.19 % students who qualify for free and reduced lunches.

Table 2

School Demographic Information for Field Placements

	Student Teaching Practicum			Teacher Assistant Practicum		
	n	M	SD	n	M	SD
Free Lunches	25	59.24	28.92	27	59.19	25.67
Minorities	25	50.68	30.67	30	49.2	25.15

Key Findings Concerning Preservice Teachers' Beliefs

The following summary addresses the research question below and presents the key study findings concerning PSTs' beliefs.

What beliefs do White PSTs have about students from racial minority backgrounds?

For this needs assessment, the MU PSTs' scores were also organized into Larke's (1990) five subscales, and the complete results of the survey are presented below in Tables 2-5. This subscale organization and analysis were developed by combining several researchers' work described in this section (Iwai, 2013 Larke, 1990; Milner, Flowers, Moore, & Flowers, 2003). The research suggests that many PSTs have underdeveloped cultural sensitivity skills (Larke, 1990). Larke (1990) conducted a study with 51 female PSTs to investigate their cultural sensitivity levels. Larke (1990) utilized Henry's (1986) Cultural Diversity Awareness Inventory (CDAI) to measure PSTs' beliefs about multiculturalism and diversity. Larke (1990) scored the assessment using five subscales (a) General Cultural Awareness, (b) the Culturally Diverse Family, (c) Cross Cultural Communication, (d) Assessment, and (e) the Multicultural Environment. Later, Milner et al. (2003) replicated Larke's (1990) study with 99 PSTs used the same five subscales to score the PST's responses to the CDAI survey to present study data in a meaningful way.

Similarly, Iwai (2013) utilized the CDAI for a pre and post-assessment in her study to investigate 19 PSTs' perceptions of diversity and of using multicultural children's literature while were enrolled in a foundational literacy course. Study findings revealed that PSTs developed more positive attitudes towards the use of multicultural literature and increased their attitude towards diversity issues. Iwai (2013) reports the pre and post-assessment results by sharing the mean score for each of Larke's (1990) five subscales. The PST's highest post scores were in the categories of cultural awareness and multicultural environment. These results were similar to both Larke's (1990) and Milner et al.'s (2003) findings that PST's indicated strong cultural awareness.

For this needs assessment, the MU PSTs' scores were also organized into Larke's (1990) five subscales, and the complete results of the survey are presented below in Tables 2-5. The mean scores of each category are also shared. In addition, several specific items are selected from each category to give an overview of the findings from each category.

General cultural awareness. The General Cultural Awareness subscale explored PSTs' perceptions of their cultural sensitivity (Milner et al., 2003). The MU PSTs' mean score for General Cultural Awareness was 4.01 compared to Iwai's (2013) pre-assessment score of 4.00, and post-assessment score of 4.18. MU PST's scores imply that they have a high degree of awareness of the cultural differences between them and their students, as can be seen with the 100 percent agreement with this statement: I believe my culture to be different from some of the children I serve.

The MU group also shows strong agreement with the importance of identifying the ethnic group of each of their students.

As shown in table 3, 29% of the MU study participants disagree when asked if they preferred to work with children and parents who share their cultural background while 14 % agreed, and 57% were neutral. These percentages are comparable to Milner et al.'s (2003) findings that 38% of PSTs disagreed with this statement, while 20% agreed, and 41% were neutral. The high degree of MU PST neutral scores for this question needs to be explored.

Table 3

Preservice Teachers Survey Responses Concerning Cultural Awareness

Item	**Strongly Agree & Agree N (%)**	**Strongly Disagree & Disagree N(%)**	**Neutral N (%)**
I believe my culture to be different from some of the children I serve.	14 (100)	0 (0)	0 (0)

Item	Strongly Agree & Agree N (%)	Strongly Disagree & Disagree N(%)	Neutral N (%)
I believe it is important to identify immediately the ethnic groups of the children that I serve.	13 (93)	0 (0)	1 (7)
I believe I would prefer to work with children and parents whose cultures are similar to mine.	2 (14)	4 (29)	8 (57)
I believe I am uncomfortable in settings with people who exhibit values and beliefs different from my own.	0 (0)	10 (71)	4 (29)
I believe I am sometimes surprised when members of certain ethnic groups contribute to particular school activities.	1 (7)	11 (79)	2 (14)
*Percentages do not sum to 100 due to rounding			

The culturally diverse family. The second category, The Culturally Diverse Family, measured the extent to which PSTs felt inclined to include parents in a student's learning process (Milner et al., 2003). MU PSTs mean score for the subcategory of Culturally Diverse Family was 3.68 compare to Iwai's (2013) report of PST's mean pre-assessment score of 3.71 and post-assessment of 3.91. The MU group is not in agreement on several statements in this subcategory as their answers are distributed across the spectrum of responses. For example, the statement: "I believe in asking families of diverse cultures how they wish to be referred to (e.g., Caucasian, White, Anglo) at the beginning of our interaction.", 29% agree, 29% disagree, and 43% are neutral. These scores compare to the PST's scores in Milner et al.'s (2003) study because their scores of 25% agree, 36% disagree, and 36% are neutral also distributed responses.

Further investigation about MU PST's responses might explain these findings. MU PSTs generally express generally positive attitudes about interacting with parents. However, one MU

PST agreed that they experience frustration when dealing with parents from diverse cultural backgrounds during parent-teacher conferences.

Table 4

Preservice Teachers Survey Responses Concerning a Culturally Diverse Family

Item	**Strongly Agree & Agree N (%)**	**Strongly Disagree & Disagree N(%)**	**Neutral N (%)**
I believe other than required school activities, my interactions with parents should include social events, meetings in public places, or telephone conversations.	6 (43)	2 (14)	6 (43)
I believe it is necessary to include on-going parent input in program planning.	11 (79)	2 (14)	0 (0)
I believe Individualized Education Programs meetings or	11 (79)	0 (0)	3 (21)
I believe the family's views of school and society should be included in the school's yearly planning program	8 (57)	0 (0)	5 (36)
I believe that I sometimes experience frustration when conducting conferences with parents whose culture is different from my own.	1 (7)	8 (57)	4 (29)
I believe parents know little about assessing their own children.	3 (21)	10 (71)	1 (7)
I believe in asking families of diverse cultures how they wish to be referred to at the beginning of our interaction.	4 (29)	4 (29)	6 (43)
*Percentages do not sum to 100 due to rounding * One preservice teacher chose not to answer two questions in this subscale section			

Cross cultural communication. The third category, Cross Cultural Communication, assessed PSTs' awareness of their aptitude to communicate with people from diverse backgrounds (Milner et al., 2003). MU PSTs mean score for the subcategory of Cross Cultural

Communication was 3.93 compared to Iwai's (2013) reported PSTs' mean pre-assessment score of 3.24 and post-assessment of 3.12 indicating a higher score for the MU PSTs.

Mason University PSTs generally responded in a positive way to the Cross Cultural Communication statements. However, there is a high number of neutral responses. Between 1-4 PSTs (*n*=14) responded with a neutral score. The prominent degree of MU PST neutral scores for this subcategory needs to be explored.

Table 5

Preservice Teachers Survey Responses Concerning Cross Cultural Communication

Item	**Strongly Agree & Agree N (%)**	**Strongly Disagree & Disagree N(%)**	**Neutral N (%)**
I believe I would be uncomfortable in settings with people who speak non-standard English.	1 (7)	10 (71)	3 (21)
I believe when correcting a child's spoken language, one should role model without further explanation.	1 (7)	11 (79)	2 (14)
I believe that there are times when the use of non-standard English should be ignored.	9 (64)	4 (29)	1 (7)
I believe English should be taught as a second language to non-English speaking children as a regular part of the school curriculum.	10 (71)	0 (0)	4 (29)
*Percentages do not sum to 100 due to rounding			

Assessment. The fourth category, Assessment, examined PSTs' beliefs regarding academic testing and measurement (Milner et al., 2003). Mason University PSTs mean score for the subcategory of Assessment was 3.69 compare to Iwai's (2013) reported PSTs' mean pre-assessment score of 3.47, and post-assessment score of 3.47. When MU PSTs were asked if students should be referred for testing if learning difficulties appear to be cultural or language

related, 43% agreed, 14 % disagreed, and 43% were neutral. These scores are similar to Milner et al.'s (2003) findings of 23% agree, 49% disagree, and 27% are neutral. This high degree of MU PSTs' agreement and neutral scores for this statement suggests that many MU PSTs may not believe that it is their responsibility to scaffold the learning of students who struggle due to cultural background or language factors.

Further, these scores might indicate PST would refer students who struggle for cultural or language issues for testing instead of using instructional strategies that either assist learners with connecting new learning to prior knowledge or in some instances helps them create new foundational understandings needed to learn the new skill or knowledge (Gee, 2008). For struggling learners, using supportive instructional strategies is critical because new skills or content loosely tied to a learners' prior knowledge is often not learned well, whereas new learning that is assimilated with prior knowledge is more deeply learned and durable (Gee, 2008). PSTs preference to refer students from culturally diverse backgrounds for testing instead of using instructional strategies to equip them to develop independent problem-solving skills suggests that PSTs misinterpret these students as dependent learners.

Table 6

Preservice Teachers Survey Responses Concerning Assessment

Item	**Strongly Agree & Agree N (%)**	**Strongly Disagree & Disagree N(%)**	**Neutral N (%)**
I believe a child should be referred for testing if learning difficulties appear due to cultural differences and/or language. appear to be cultural or language differences.	6 (43)	2 (14)	6 (43)
I believe adaptations in standardized assessments to be	1 (7)	13 (93)	0 (0)

Item	Strongly Agree & Agree N (%)	Strongly Disagree & Disagree N(%)	Neutral N (%)
questionable because they alter reliability and validity.			
I believe translating a standardized achievement or intelligence test to the children's dominant language gives the child an added advantage and does not allow for peer comparison.	1 (7)	12 (86)	1 (7)
*Percentages do not sum to 100 due to rounding			

Multicultural environment. The fifth category, Multicultural Environment, evaluated the degree to which PSTs were willing to employ instructional strategies to promote equitable learning for all students (Milner et al., 2003). Mason University PSTs' mean score for the subcategory of Multicultural Environment was 3.89 compare to Iwai's (2013) reported PSTs' mean pre-assessment score of 4.06 and post-assessment score of 4.06. Generally, MU PSTs responded positively to creating a multicultural environment. However, there are outliers. Between 1-4 PSTs (n= 14) responded in a way that indicated they are unclear on how to facilitate a multicultural environment.

Mason University PSTs had a low agreement with the statement that cultural knowledge should affect teacher expectations, as can be seen with the responses of 21% agreement, 50% disagreement, and 29% neutral. These responses can be compared to Milner et al.'s (2003) reported responses of 14% agreement, 50% disagreement, and 35% neutral. The MU PSTs responses to this statement may indicate that MU PSTs have a lower sensitivity to the significance of how a student's cultural background impacts their knowledge construction and acquisition. The scores also may indicate that MU PSTs seem unaware of the responsibility they

have as teachers to provide learning experiences to support learners who struggle with academic tasks due to their cultural background factors.

Furthermore, these scores suggest that many of the MU PSTs do not recognize that students create meaning through interactions with people in their environment in which both the culture and context of a student play key roles in how learning occurs (Vygotsky, 1978). Knowledge and learning for students are more than representations in their brain; rather it represents an interconnected relationship between the student's mind and body and the environment in which the learner lives and functions (Gee, 2008). Thus, it is vital for PSTs to know and understand the cultural frameworks and background knowledge that each learner enters the classroom with (Gee, 2008). If PSTs recognize and value the knowledge and skills students bring to their learning, they will be able to better help students construct new knowledge by connecting the new knowledge to the known (Gee, 2008).

Table 7

Preservice Teachers Survey Responses Concerning Establishing a Classroom Multicultural Environment

Item	**Strongly Agree & Agree N (%)**	**Strongly Disagree & Disagree N(%)**	**Neutral N (%)**
I believe in a society with as many racial groups as the U.S.A., I would expect and accept the use of ethnic jokes or phrases by some children.	1 (7)	13 (93)	0 (0)
I believe that there are times when racial statements should be ignored.	2 (14)	9 (64)	3 (21)
I believe the solution to communication problems of certain ethnic groups is the child's own responsibility.	1 (7)	13 (93)	0 (0)
I believe it is my responsibility to provide opportunities for children to share cultural differences	13 (93)	1 (7)	0 (0)

Item	Strongly Agree & Agree N (%)	Strongly Disagree & Disagree N(%)	Neutral N (%)
concerning food, dress, family life and/or beliefs.			
I believe adaptations in programming to accommodate the different cultures as my enrollment changes.	12 (86)	0 (0)	2 (14)
I believe the displays and frequently used materials within my setting should show at least three different ethnic groups or customs.	12 (86)	0 (0)	2 (13)
I believe in a regular rotating schedule for job assignments which includes each child within my setting.	9 (64)	1 (7)	4 (29)
I believe one's knowledge of a particular culture should affect one's expectations of the children's' performance.	3 (21)	7 (50)	4 (29)
I believe that the teaching of ethnic customs and traditions is NOT the responsibility of public school programs or personnel.	0 (0)	12 (86)	2 (14)
*Percentages do not sum to 100 due to rounding			

Summary

The data collected from the Preservice Teacher Beliefs Survey revealed relatively high responses; however, four key areas of need were highlighted for MU PSTs to receive instruction. The crucial first area concerns how a student's cultural background influences their knowledge construction. The second important area concerns how PSTs need to identify, value, and build upon students' cultural strengths. The third crucial area is on how PSTs need to use instructional strategies to support students from diverse cultural backgrounds with their knowledge construction and acquisition. The fourth fundamental area is on how PSTs need to develop a

social justice perspective that propels PSTs to take responsibility to provide rich and equitable learning experiences for all students.

Conclusion

This needs assessment provided an opportunity to explore the multicultural offerings that MUTE PSTs receive and the beliefs that PSTs have about students from culturally diverse backgrounds. The analysis of the data collected from the needs assessment has highlighted aspects of the key underlying factors that inform my understanding of the problem of practice concerning PSTs' preparedness to teach reading comprehension to elementary students from culturally diverse backgrounds in my professional context. This needs assessment addressed two research questions: a) What multicultural education instruction have PSTs received on how to use effective instructional strategies to support learners from diverse cultural backgrounds? and b) What beliefs do White PSTs have about students from culturally diverse backgrounds?

In response to the first question, there is evidence that the MUTE program does not provide adequate multicultural education instruction. In particular, the current multicultural education instruction offered in the MUTE program has not adequately educated MU PSTs to recognize the need for students from diverse cultural backgrounds to engage in learning experiences that equip them to become self-directed learners or equip them to think and problem solve on their own. Nor has the multicultural education instruction offered equipped PSTs with instructional strategies to provide these learning experiences. These findings are confirmed in the literature. Many White PSTs enter their teacher education programs with idealistic beliefs that students enter the classroom with equal standing and that the same pedagogical activities will be equally effective for all students (Causey et al., 1999) or the belief that each student has the same opportunities to succeed in school and that their success can be determined by their choices,

abilities, and efforts (Wang, Castro, & Cunningham, 2014). A single course on diversity has a limited effect on changing the beliefs or teaching practices of prospective teachers toward diverse students (Hollins & Guzman, 2005; Ladson-Billings, 1999; Sleeter & Owuor, 2011). The studies reviewed by Hollins and Guzman (2005) indicate that PSTs who go through teacher education programs that only offer a stand-alone course on diversity often exit their program with unchanged beliefs (Hollins & Guzman, 2005).

Although the opportunity to teach and work with students from diverse backgrounds can be a meaningful experience for MU PSTs, those that are placed in diverse practicum settings may not receive the maximum benefit from the experiences because they do not enter their practicums with a robust multicultural education foundation. There may even be the possibility that the limited multicultural education foundational experiences could result in MU PSTs, as Cross (2005) suggests, promoting additional injustices and inequities instead of preventing them. As presented in the literature review in chapter one, Ladson-Billings (2006) found that unprepared PST's held many misconceptions about culture regarding student behavior during their practicums. PSTs in Ladson-Billings' (2006) study attributed students' behavior choices as a problem of culture instead of investigating other factors that could have influenced the students' behavior.

In response to the second research question regarding the PSTs beliefs about students from culturally diverse backgrounds, not surprisingly with a lack of multicultural education instruction from the teacher education program, the analysis revealed that there is evidence that MU PSTs do not understand the importance of how a student's cultural background influences their knowledge construction and acquisition. This lack of understanding causes MU PSTs to misinterpret students from diverse cultural backgrounds as dependent learners and inhibits them

from taking responsibility to provide students from diverse cultural backgrounds with learning experiences that help them become self-directed learners or equip them to think and problem solve on their own. As the literature review in chapter one indicated, PSTs' knowledge about how culture influences teaching and learning also influences their preparedness to effectively teach students from diverse backgrounds (Lazar, 2007). Without an understanding of how culture influences learning and a recognition of the strengths that diverse students bring with them to the classroom, PSTs can misinterpret students from diverse backgrounds as dependent learners (Barnes, 2006).

Although the needs assessment study generated helpful findings, the study had limitations. In addition to my role as a researcher, I am also an assistant professor in the MUTE program. Although I was not teaching any of the PST's during the time of the needs assessment and I did not disseminate the surveys, there was potential for subject bias. My name was on the consent form, and PSTs could have presented responses that they thought I expected. In addition, due to the small sample size of 13 PSTs, further research is needed before being able to generalize the study findings.

As demonstrated in this needs assessment, PSTs need targeted and thoughtful instruction to support them as they develop their teaching practice. In order to better prepare PSTs for teaching students from diverse cultural backgrounds, multicultural education can be infused strategically across the teacher education program. Chapter 3 explores the literature for the design of the intervention that will infuse multicultural education in a reading methods course to support PSTs development of knowledge, skills, and self-efficacy to teach diverse learners.

Chapter 3

Intervention Literature Review

The participants in the needs assessment administered in my professional context revealed PSTs' unpreparedness to teach students from diverse cultural backgrounds effectively. Key findings from participant responses and document analysis of the Mason University Teacher Education (MUTE) program revealed important contributing factors for the problem of practice concerning PSTs' preparedness to teach reading comprehension to students from diverse cultural backgrounds. First, there is evidence from the needs assessment that the MUTE program does not provide adequate multicultural education instruction. In particular, the multicultural education instruction offered in the current MUTE program does not adequately prepare MU PSTs to recognize the need for students from diverse cultural backgrounds to engage in learning experiences that equip them to become self-directed learners. The program also does not equip PSTs with instructional strategies that encourage diverse learners to become independent learners and problem solvers.

Second, Mason University (MU) PSTs do not recognize the importance of how a student's cultural background influences their knowledge construction and acquisition. The PSTs also do not embrace their responsibility to provide students from diverse cultural backgrounds with learning experiences that help them become self-directed learners or to equip students to think and problem solve on their own. This chapter provides an overview of the research related to interventions that teacher education programs use to support PSTs' development of beliefs, knowledge, and skill to effectively teach reading comprehension to elementary students from diverse cultural backgrounds. In particular, this chapter presents a synthesis of instructional interventions that have been effective in preparing PSTs with the knowledge, skill, and self-

efficacy to effectively equip diverse students to independently comprehend and respond deeply to texts.

Teacher Education Program Context

Teacher education programs face the daunting task of preparing PSTs to effectively navigate the "demographic divide" (Castro, 2010, p. 198) of mostly White, middle-class teachers teaching an increasingly diverse student body (Castro, 2010). PSTs must face the reality that they will continue to come into contact with students whose cultural, ethnic, linguistic, racial, and social class backgrounds differ from their own (Howard, 2003). Many White PSTs enter their programs with limited personal or academic experience with people from diverse backgrounds (Kyles & Olafson, 2008). Also, many PSTs enter their teacher education programs with deficit views and lower expectations of students from culturally diverse backgrounds, limited knowledge of racial inequities, and limited cultural awareness (Sleeter, 2008).

Teacher education programs should provide learning experiences to help PSTs develop the knowledge and skill necessary to teach diverse student populations (Milner, 2010). Teacher education programs need to prepare PSTs to develop relationships with students from backgrounds different from their own, develop instructional pedagogy that supports diverse students to reach their highest protentional, and become change agents who can recognize and challenge injustice (Banks, 2002; 2016; Cochran-Smith, 2001; Howard, 2003). Research reveals that effective teacher education components that help equip PSTs to work with diverse student populations include instruction on culturally responsive teaching, field placement opportunities to apply culturally responsive instructional techniques with diverse students, and critical reflection (Sleeter, & Owuor, 2011).

Self-Efficacy Theory

Grounded in sociocognitive learning theories, the construct of self-efficacy is derived from Bandura's (1986) perspective that motivation is mainly influenced by outcome expectations and efficacy expectations. Outcome expectations consist of a person's expectations concerning the likely consequences of a particular behavior, whereas efficacy expectations consist of a person's beliefs concerning his or her ability to influence or produce a desired outcome (Bandura, 1986). Self-efficacy is an essential element in motivation, cognition, metacognition, and learning (Chapman & Tunmer, 2003).

Teacher self-efficacy is a type of self-efficacy in which the teacher's belief in their ability to impact student learning motivates them to put more effort into helping students reach their highest learning potential (Tschannen-Moran & Hoy, 2001). Teacher self-efficacy relates to the beliefs that teachers hold in their ability to undertake particular teaching tasks (Pendergast, Garvis & Keogh, 2011). Self-efficacy, as defined by Bandura (1997), is the belief in one's capability to organize and execute a particular task. Self-efficacy, therefore, influences teachers' emotions and thinking patterns that empower them to teach effectively (Pendergast et al., 2011).

Teacher self-efficacy contains four components: (a) mastery experiences, which provide evidence of ability) (b) vicarious experiences, which provide modeling and observation of various successful instructional approaches (c) social persuasion, which includes encouraging feedback from other professionals (d) psychological arousal, which includes the teacher's psychological and emotional state (Pendergast et al., 2011). Mastery experiences are the most influential in helping teachers develop beliefs about their abilities by creating a bridge between their skills and action (Bandura, 1986). Mastery experiences consist of past experiences where an individual perceived themselves as successfully completing a task. Because the individual

experienced success with the prior task, they project that they will be successful with this task in the future (Bandura, 1997).

Culturally Responsive Teaching

In her seminal work, *Culturally Responsive Teaching: Theory, Research, and Practice*, Gay (2000) proposed the concept of culturally responsive teaching. Culturally responsive teaching is defined as "using the cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students as to make learning encounters more relevant and effective for them" (Gay, 2010, p. 31). Culturally responsive teaching is an approach to instruction that is sensitive to students' sociocultural context and seeks to integrate the students' cultural aspects to help create a productive learning environment (Ooka Pang, 2005). The education of culturally diverse students, according to Gay (2013), "should connect in-school learning to out-of-school living; promote educational equity and excellence; create community among individuals from different cultural, social and ethnic backgrounds; and develop students' agency, efficacy, and empowerment" (p. 49).

Culturally responsive teaching is grounded in the belief that students' cultural differences are assets, students' cultural knowledge should guide curriculum development and instructional strategies, and teachers should act as change agents for educational equity (Gay, 2010). Culturally responsive teaching supports the academic development of students from diverse cultural backgrounds by teaching to and through their cultural strengths, their cognitive capabilities, and their prior experiences. Culturally responsive teaching helps make learning more personally meaningful and more natural to master (Gay, 2010).

Developing Culturally Responsive Teaching Self-Efficacy in Preservice Teachers

For PSTs to effectively implement culturally responsive pedagogy in their teaching practicums, they need to feel efficacious in their ability to enact their culturally responsive teaching knowledge and skill in a classroom context (Fitchett, Starker, & Salyers, 2012). The construct of culturally responsive teaching self-efficacy is the practitioner's perception of their ability to effectively implement the culturally responsive teaching practices to achieve positive student outcomes using this pedagogical approach (Siwatu, 2007). It is essential to help PSTs develop culturally responsive teaching self-efficacy because PSTs who showcase culturally responsive teaching self-efficacy are more likely to utilize culturally responsive teaching techniques and are more confident in their ability to work with diverse student populations (Siwatu & Starker, 2010). These important findings will be discussed later in this chapter.

In their study, Fitchett et al. (2012) found a correlation between an innovative culturally responsive 3Rs instructional model (Review, Reflect, React) implemented in a social studies methods course and teacher candidate's culturally responsive self-efficacy. Study participants included 20 teacher candidates enrolled in a social studies methods course taught by one of the researchers. Quantitative data were collected for a pre-and post-survey using a revised version of the Culturally Responsive Teaching Self-Efficacy Scale (Siwatu, 2007). The researchers added questions about teaching diverse social studied content. A Cronbach alpha test run on the revised scale reported substantially high-interitem reliability (a =.828*)*. Paired t-tests indicated that candidates' post-test self-efficacy to teach in diverse settings and to teach culturally diverse social studies content was significantly higher than pre-test self-efficacy. Fitchett et al.'s (2012) study exemplifies how a teacher educator can scaffold PSTs to learn culturally responsive teaching in a teacher education content course.

Building a Scaffold for Culturally Responsive Pedagogy

Research reveals that effective teacher education programs cohesively embed learning opportunities concerning culturally responsive teaching throughout their program with courses that use multiple strategies to help PSTs develop beliefs, knowledge, and skill to work with diverse students (Sleeter & Owuor, 2011). PSTs who come from cultures different from the students they teach can learn the skill and knowledge needed to effectively teach a diverse student body when they experience supportive instruction and learning opportunities (Gay, 2002). Sociocultural theorists promote that understanding and knowledge develops through social contexts and interactions (Gee, 2015; Vygotsky, 1978).

Seminal theorists believed that problem solving, social interactions, and intercultural experiences offer rich opportunities for students to learn and develop (Dewey, 1938; Vygotsky, 1978). PSTs have the opportunity to gain valuable understanding and gain better quality skill development through shared experiences, collaboration, and problem-solving opportunities in supportive contexts such as collaborative college classrooms and strategic field placements in diverse school environments (Bennett, 2012). In her case study, Bennett (2012) investigates which facets of a field experience contribute to eight PSTs' understanding of culturally responsive teaching while they were enrolled in a writing methods course. Data were collected from PSTs written reflections, written field notes, focus group interview transcripts, and a reflexive researcher journal. The researcher used a deductive constant comparison method of analysis to identify data patterns and themes. The study findings revealed that the field experience aspects of one-on-one PST-student interactions and scaffolded reflection activities helped PSTs understand how to scaffold student's learning by adjusting instruction to their learning needs.

Both Fitchett et al.'s (2012) and Bennet's (2012) studies provided supportive learning contexts that helped PSTs develop their culturally responsive knowledge and skill. Fitchett et al. (2012) provided a supportive instructional method, whereas Bennet (2012) provided supportive course components. In both studies, PSTs grew in their culturally responsive teaching knowledge and skill with the responsive scaffolding provided by the teacher educator.

Quality of Culturally Responsive Teaching and Learning Experiences.

The quality of culturally responsive teaching and learning experiences offered in teacher education courses has more influence on PSTs' culturally responsive teaching development than the quantity of teacher education courses that address culturally responsive teaching in which PSTs are enrolled (Siwatu & Starker, 2010). When Siwatu and Starker (2010) used a survey to investigate 84 PSTs' sense of preparedness for culturally responsive teaching, they found that PSTs sense of preparedness to effectively teach and manage students from diverse backgrounds was related to the quality of the teacher education courses they took. In particular, Siwatu and Starker (2010) reported that effective teacher education courses include relevant field experiences and learning activities that build PSTs' self-efficacy to teach students from diverse backgrounds successfully.

The researchers obtained study data from a background questionnaire, the Culturally Responsive Teaching Self-Efficacy Scale (CRTSE) (Siwatu, 2007) with an internal reliability measure of 0.96, and a two-question scale that addressed a fictional case study involving a teacher who faced a challenging cultural classroom conflict. Correlation coefficients were computed to discover the relationship of variables such as ratings of the effectiveness of coursework, CRTSE strengths index, case study self-efficacy, and sense of preparedness. This study found that there was a high correlation between PSTs' culturally responsive teaching self-

efficacy and their belief that they would be able to resolve a cultural conflict involving culturally diverse students. The study also found that PSTs felt more prepared to navigate through cultural conflicts with students with diverse backgrounds if they had taken teacher education courses that they felt were effective in preparing them to teach culturally diverse students.

Instructional Components

Opportunities for critical reflection, instruction on culturally responsive teaching pedagogy, and field experiences with students from diverse cultural backgrounds are crucial instructional components of teacher education courses that promote culturally responsive teaching (Sleeter & Owuor, 2011). The following two qualitative studies showcase these effective instructional components. In a study, Kidd, Sanchez, and Thorp (2008) investigated the particular education program experiences that supported the development of 19 PSTs' dispositions and pedagogy in their two-year Master of Education in Early Childhood degree program. The researchers collected data from participants' Guiding Principles Narrative, a reflection paper that they wrote at the end of the early childhood course. The narrative described the19 PSTs' beliefs about teaching diverse students before the program, beliefs about teaching diverse students after the program, and specific program experiences that influenced their transformation of beliefs. The researchers inductively coded the reflections and identified themes. Findings of the study revealed that the program experiences that supported growth in PSTs' knowledge and skill development included critical reflections, learning experiences that included discussion and dialogue, and diverse practicums. Although the analyzed data used to generate the findings were taken from only one written sample from each of the 19 PSTs, the insights concerning what learning experiences support PSTs' development add to the academic conversation about preparing PSTs for diverse classrooms.

Similarly, in another study, Gere, Buehler, Dallavis, and Haviland (2009) investigated which teacher education learning opportunities supported the development of culturally relevant teaching pedagogy in 15 PSTs enrolled in a four-year Teach for Tomorrow (TFT) program. The researcher inductively coded and categorized data collected from weekly journal entries, written assignments, field notes from classroom observations, and interview transcripts with four focal-participants selected because of their candor during class discussions. Themes were then identified, such as racial identity and racial self-positioning. The researchers found that most of the PSTs initially struggled to develop a deep awareness of their cultural perspective. However, class assignments that helped them process their cultural identity supported their development. These assignments consisted of reading and writing reflections on the content of articles about students' identities and challenges that diverse students face. The researchers also found that field placements in under-resourced schools, as well as explicit instruction and modeling of the tenets of culturally responsive pedagogy, supported PSTs' development of culturally responsive pedagogy.

Research reveals that PSTs can grow in their culturally responsive knowledge, skill, and self-efficacy when teacher educators infuse their teacher education course with specific instructional techniques such as research-based instruction (Fitchett et al., 2012; Kidd et al., 2008), critical reflection (Bennett, 2012; Gere et al., 2009) and diverse field placements (Bennett, 2012; Gere et al., 2009; Kidd et al., 2008). Providing these quality learning experiences helps PSTs prepare to teach diverse classrooms (Siwatu & Starker, 2010).

Culturally Responsive Teaching Intervention Components

Teacher educators who provide opportunities for effective culturally responsive teaching pedagogy instruction, relevant field placement opportunities, and critical reflection, contribute to

the development of PSTs' understandings about and skill development in culturally responsive teaching (Bennett, 2012). Critical reflection can be defined as the process of examining the underlying assumptions of a given problem (Mezirow, 1998). In her richly detailed mixed methods study, Lazar (2007) investigated how providing PSTs with complementary learning opportunities enhanced PSTs understanding of culturally responsive teaching. Specifically, Lazar's (2007) intervention provided the following: opportunities to receive targeted pedagogy instruction, to critically reflect, and to engage in field placements in a diverse urban setting. Lazar's (2007) study compared two sets of PSTs' understandings and attitudes about teaching reading to diverse students after they completed an advanced level reading methods course. The study had an instructional and experimental track. The instructional track included two reading methods courses taught by other faculty members. The experimental track also included two reading methods courses but taught by Lazar (2007). Courses had similar texts, objectives, and assignments and included a field placement. For the experimental track, the instructor added a field placement where PSTs applied their literacy pedagogy skills while teaching diverse students in an urban setting. Also, in the experimental track, the instructor added course readings and discussions that focused on how race, class, and culture corresponded to literacy acquisition. PSTs in the general reading track had field experiences in a suburban setting, and their course materials did not focus on cultural diversity.

Data in Lazar's (2007) study were collected from a cultural autobiography assignment and an end-of-the-semester questionnaire. Analysis of the data included several steps. First, the researcher explored the relationships between PSTs' literacy course experiences with their attitudes toward children's literacy potential and their confidence in teaching reading in diverse contexts by calculating the difference between each group's mean questionnaire ratings using

ANOVA. Next, she coded the questionnaire short answer data and the autobiographies to identify themes. Then she generated assertions about PSTs' beliefs about teaching reading to diverse students by looking for key linkages between PSTs' ratings (on their confidence of teaching in an urban setting and their impression of students' literacy abilities) and their written statements.

This study found that PSTs who took the experimental track rated diverse students' reading potential much higher than the PSTs who took the instructional track of courses. Also, the PSTs in the experimental track who had more hands-on experience teaching diverse students developed fuller contextual knowledge of how diverse students learn to read. The hands-on experiences also gave the PSTs significantly higher confidence in teaching diverse students how to read and write than the PSTs who took the instructional reading instruction track. The combination of a critical reflection and diverse field placement components added to the targeted pedagogy instruction on reading instruction component enhanced the PSTs' knowledge, skill, and self-efficacy to teaching reading comprehension to elementary students from diverse backgrounds.

Similar to my professional context, the Lazar (2007) intervention was infused in an undergraduate reading instruction course with primarily White, middle-class students who underestimate the cognitive and literacy potential of students from diverse cultural backgrounds. The combined instructional components of critical reflection, direct instruction on instructional strategies, and a diverse field placement show strong promise for helping PSTs develop knowledge, skill, and self-efficacy to effectively teach reading comprehension to diverse students. According to Lazar (2007), infusing these three components into a reading instruction

course can help PSTs realize their role in fostering the literacy protentional of students from diverse cultural backgrounds.

Course Overview for Culturally Responsive Reading Instruction

The following course overview visually represents the three instructional components, informed by Sleeter and Owuor 's (2011) review of research and Lazar's (2007) study, that instructors can embed in teacher education courses to influence PSTs' development of culturally responsive reading instruction knowledge, skill, and self-efficacy (See Figure 6). Critical reflection, research-based instruction, and diverse field placements can each support PSTs' development of culturally responsive teaching pedagogy (Sleeter & Owuor, 2011). PSTs who engage in all three of these instructional components during an instructional reading course make more progress in developing their knowledge, skill, and self-efficacy to teach reading to culturally diverse students than PSTs who take instructional courses that only provide direct instruction on how to teach reading to diverse students (Lazar, 2007).

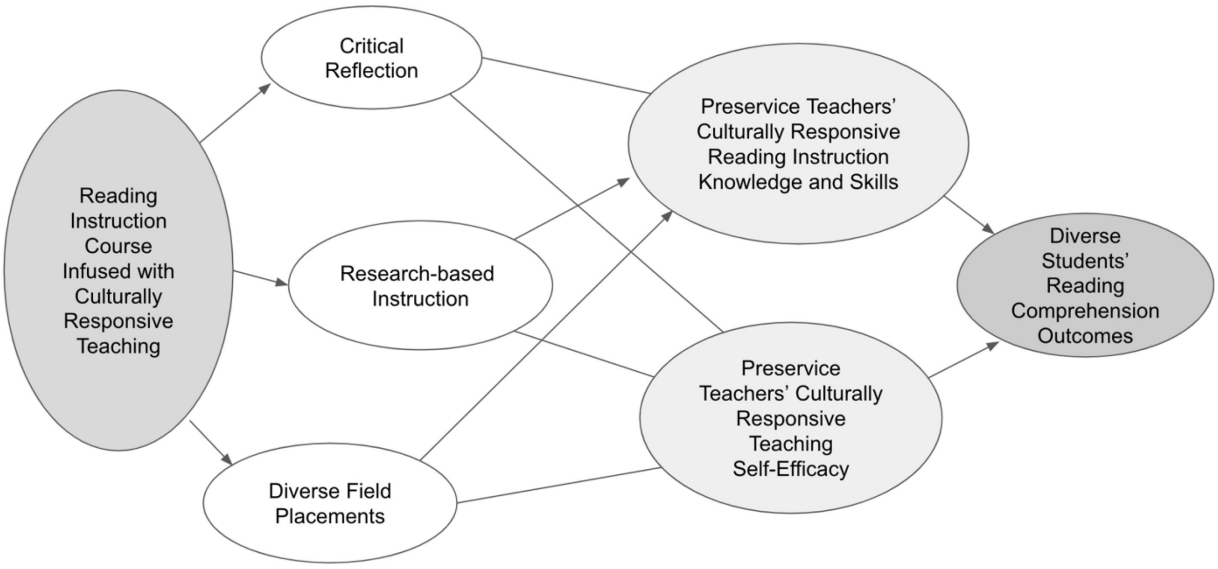

Figure 6. Reading Methods Course Overview of Culturally Responsive Reading Instruction.

Instruction on Culturally Responsive Teaching

In order to prepare PSTs to effectively teach students from culturally diverse backgrounds, teacher education programs need to infuse instruction on culturally responsive teaching throughout their program (Sleeter & Owour, 2011). A way to effectively integrate direct instruction on culturally responsive teaching into a reading methods course involves situating reading instruction within a culturally responsive teaching framework (Barnes, 2006). The instruction could help PSTs (a) process their underlying beliefs about teaching reading (Barnyak & Paquette, 2010) (b) learn culturally responsive themes and instructional practices (Hill, 2012; Lazar, 2007; Sharma & Christ, 2017), and (c) learn approaches to adapting their instruction (Daly, Mosyjowski, Oprea, Huang-Saad & Seifert, 2016; Griffith, 2017).

Reading Instruction Beliefs

Reading instruction professors must not only teach PSTs how to implement exemplary research-based literacy instruction practices, but they also need to help PSTs process their underlying beliefs about teaching literacy (Barnyak & Paquette, 2010). Many PSTs enter teacher education programs with preconceived beliefs about literacy instruction based on how they were taught (Barnyak & Paquette, 2010). PSTs need to recognize that although a particular model of reading instruction was used during their own educational experience, they need to make a concerted effort to examine their own beliefs and compare them to current research-based literacy practices, so they can make sound instructional decisions that support all students' successful literacy acquisition (Barnyak & Paquette, 2010). Without working through their underlying literacy instruction beliefs, PSTs may disregard the research-based literacy instruction strategies learned in their reading instruction courses because they do not feel the new methods are necessary to support the diverse students they teach (Barnyak & Paquette, 2010).

Reading instruction professors need to help PSTs recognize the importance of utilizing effective research-based reading instruction methods that build on students' strengths, regardless of their prior personal experience. When reading instruction professors provide PSTs opportunities to process their underlying beliefs about literacy instruction, PSTs can adjust their instructional schema and build a platform for new instructional knowledge and skills that can help them effectively teach literacy in diverse classrooms (Barnyak & Paquette, 2010). Two researchers, Barnyak and Paquette (2010), conducted a quantitative study to investigate PSTs' modification of their reading instruction beliefs during their enrollment in a reading instruction course. The researchers collected data from pre-and post-responses to a 24-question Likert scale literacy instruction survey that assessed PSTs reading instruction beliefs (Knudson & Anderson, 2000). Descriptive statistics were run on collected data to compare PSTs' beliefs before and after the course. Findings revealed no significant difference in PSTs' beliefs concerning how to teach phonics and word analysis. However, there was a significant difference between PSTs pre- and post-survey responses concerning the need to teach students comprehension skills so they can understand what they read. The study findings combined with research that supports the resiliency of PSTs' beliefs during their participation in teacher education programs led the researchers to conclude that if PSTs do not experience quality literacy instruction, they are less likely to see the value of using effective reading instruction methods. Therefore, the researchers recommended that literacy coursework should include meaningful instructional activities and a variety of opportunities for PSTs to implement the instructional strategies they learn in a field placement. For example, the researchers suggest that PSTs need to learn how to consider students' strengths when planning lessons and learn how to generate lessons that provide students with a variety of response methods.

Reading Instruction Pedagogy

In order to be prepared to teach reading comprehension to students from diverse cultural backgrounds, PSTs need instruction on how to create learning experiences that meet learners' unique learning needs (Lazar, 2007). This instruction should include effective reading strategies and pedagogy that supports the reading skill development of diverse learners (Barnes, 2006). In particular, PSTs can benefit from cognitive strategy instruction (Hill, 2012), instruction on the selection and use of culturally relevant texts (Chrise & Sharma, 2017), and instruction on engaging students through read aloud protocols (Pendergast, May, Bingham & Kurumada, 2015).

Cognitive strategy instruction. Cognitive strategy instruction is a form of comprehension instruction and discourse that supports the reading comprehension of diverse students (Hill, 2012). How a student creates meaning while they read depends on the text and the student's background and strategic knowledge (Bui & Fagan, 2013). Cognitive strategy instruction involves teaching students to interact with and make connections to the text through modeling and instructional scaffolding (Bui & Fagan, 2013).

Teaching elementary students cognitive strategies. Teaching cognitive strategies within a culturally responsive framework can be an effective approach to support the literacy outcomes of students from culturally diverse backgrounds by providing relevant learning experiences that build on students' frames of reference and learning preferences (Bui & Fagan, 2013). In their study to investigate how a culturally responsive teaching approach supported fifth-grade students' reading comprehension outcomes, Bui and Fagan (2013) found that the culturally responsive instructional approach helped students connect their learning to their background experiences. Using a quasi-experimental, pretest-posttest design, the researchers randomly

divided 49 fifth-grade students from diverse cultural backgrounds into two groups. Both groups were taught three reading strategies through a culturally responsive framework, which the researchers titled Integrated Reading Comprehension Strategies (IRCS). One of the groups was also taught using multicultural literature and cooperative learning strategies. This group was labeled IRCS Plus. The researchers used an informal reading inventory to gather students' reading comprehension data before and after six and a half instructional hours of teaching using the integrated reading comprehension strategies.

Study findings revealed that both groups of students made statistically significant gains in reading comprehension from their pretests to their posttests. However, the students in the IRCS Plus group had greater mean score gains and moved up an additional reading level. These study findings highlight how culturally responsive instructional strategies help students make greater academic gains by connecting their new learning to their background experiences and provide learning opportunities that match their learning preferences.

Cognitive strategy instruction for preservice teachers. Explicit teaching and precise modeling of cognitive strategy instruction by teacher educators can help PSTs grow in their self-efficacy to teach diverse students how to comprehend texts (Hill, 2012). The findings in Hill's (2012) case study underscores how a PST's self-efficacy to teach reading comprehension to diverse learners is enhanced with supportive instruction and modeling by the reading instruction professor. In her case study with a mixed methods framework, Hill (2012) investigated one PST's development of self-efficacy with cognitive strategy instruction for diverse learners.

This PST, "Jennifer," participated in the case study while enrolled in a literacy instruction course paired with a fifth-grade field placement in a diverse urban classroom. Jennifer's field placement consisted of 45 practicum hours, where she observed, worked with students in groups,

tutored one struggling reader, and taught two cognitive strategy reading lessons. Jennifer worked with an experienced teacher who mentored her in culturally relevant literacy practices. The mentor teacher explicitly modeled cognitive strategy instruction and gave Jennifer specific feedback as she applied the instructional techniques with the students. Culturally relevant teaching practices, based on Ladson-Billings' (1995) work, are the same as culturally responsive teaching practices based on Gay's (2000) work. Each of these pedagogies may present the terms with different nuances, but they all share the common focus of educators learning about, valuing, and bringing into the classroom the cultural resources of students, maintaining high expectations for academic achievement for all student, and developing a critical consciousness (Siwatu, 2007).

The findings of this study revealed that two course components significantly helped Jennifer grow in her self-efficacy to teach reading strategies to students from diverse backgrounds. The first key course component consisted of how the reading instruction professor mentored the PST in her development of cognitive strategy instruction. For example, the professor taught and modeled the strategies and also modeled how to help students link their background experiences to the author's message. The second critical component involved providing the PST with the opportunity to apply her growing reading instruction knowledge and skills in a supportive classroom context. The researcher collected quantitative data from a researcher designed pre-and post-survey, which contained both Likert scale and short answer questions. The researcher collected qualitative data from the short answer survey questions, field notes, Jennifer's reflection journals, and Jennifer's final essay. During the data analyses, Hill (2012) coded the data and identified emerging themes. Some of the emerging themes consisted of practicum supports, students' responses to Jennifer's reading lessons, and Jennifer's

transforming perspectives. The researcher also compared the pre-and post-survey responses to gauge development in Jennifer's self-efficacy scores. The results of the study revealed that a supportive field placement paired with precise instructional modeling from a reading professor cultivates PSTs' ability to utilize culturally relevant reading instruction techniques during their diverse field placements.

Instruction on culturally relevant instructional materials. Helping PSTs construct a culturally responsive teaching framework involves more than teaching them knowledge. PSTs need learning opportunities that help them act on culturally responsive teaching knowledge and think critically about how to select, create, and adapt supportive, instructional materials and practices (Villegas & Lucas, 2002). Villegas and Lucas (2002), two teacher educators from Montclair State University, wrote a book to provide teacher educators with a coherent framework for preparing PSTs to effectively teach students from diverse cultural backgrounds. Their goal was to provide a coherent approach to instruct PSTs in culturally responsive pedagogy.

Using culturally relevant texts with students. According to Gay (2002), instructional materials that support students from culturally diverse backgrounds should represent cultural diversity. Culturally responsive teachers intentionally select materials that are relatable and help students from culturally diverse backgrounds connect their background knowledge to new learning (Gay, 2002). Kelley, Siwatu, Tost, and Martinez (2015) investigated how using culturally relevant, Latino themed texts influenced 43 seventh grade students' recall and reading comprehension performance. The researchers used a counterbalanced within-subjects design that compared student recall and comprehension questions from both a culturally familiar and a culturally unfamiliar passage. A paired t-test was used to assess differences in student performance on recall and comprehension questions for both passages. Also, the researchers

gathered student self-efficacy data from three self-efficacy scales that had the same self-efficacy statements but differed with respect to addressing general reading self-efficacy culturally familiar self-efficacy, and culturally unfamiliar self-efficacy. A one-way repeated measures analysis of variance was utilized to analyze the differences between the three self-efficacy survey scores. Study findings revealed that participants demonstrated a significant increase in comprehension achievement for the culturally familiar reading task compared to the culturally unfamiliar reading task. Also, the study results indicate a statistically significant increase in students' self-efficacy scores for the culturally familiar reading task compared to the culturally unfamiliar reading task.

Instructing preservice teachers to select and use culturally relevant texts. Preservice teachers need to learn how to select culturally relevant texts and integrate them into reading lessons in ways that support diverse students' lesson engagement and literacy outcomes (Christ & Sharma, 2018). In Christ and Sharma's (2018) qualitative study, they investigated 17 PSTs' challenges and success in culturally relevant text selection and use during culturally responsive literacy instruction. In this study, PSTs enrolled in a service-learning course were required to develop a literacy instruction unit that integrated both culturally relevant texts and culturally responsive pedagogy. As part of the course, PSTs also needed to implement their literacy lessons with small groups of diverse elementary students in an afterschool program. PSTs taught the small groups for an hour a week for five consecutive weeks. Christ and Sharma (2018) used emergent coding and constant comparative analysis to analyze PSTs' discussion posts, self-reflections, and transcripts from collaborative peer video analysis of the tutoring. The researchers found that over time, PSTs grew in their ability to select culturally relevant texts. However, PSTs struggled with the following: (a) learning about their students' cultural identities, (b) selecting

texts that specifically matched the cultural identities of the students they worked with and, (c) the ability to engage students in conversations about the texts. The study participant number, the content of study, and the embedded tutoring components of Christ and Sharma's (2018) study compares to my professional context.

Once PSTs learn how to select culturally relevant texts, it is critical to teach them how to integrate them into culturally responsive literacy lessons (Christ & Sharma, 2018). This process of lesson integration includes having high expectations for each student, using students' strengths as an instructional starting point, modeling and scaffolding instruction, investigating and taking responsibility for students' success, creating nurturing environments, helping students to develop problem-solving and critical thinking strategies (Christ & Sharma, 2018).

Culturally relevant texts are defined as texts that reflect readers' cultures and identities and thus support readers' ability to connect with the text, affirm their identity, and increase their motivation to comprehend the text's message (Christ & Sharma, 2018). Using Bishop's (1990) metaphor of literature's ability to provide mirrors, windows, and sliding glass doors can help PSTs' think through text (Christ & Sharma). Choosing texts with settings and characters that reflect the lives of students helps the students see themselves in the text.

> Books are sometimes windows offering views of the world that may be real or imagined, familiar or strange. These windows are also sliding glass doors, and readers have only to walk through in imagination to become part of whatever world has been created or recreated by the author. When lighting conditions are just right, however, a window can also be a mirror. Literature transforms human experience and reflects it back to us, and in that reflection, we can see our own lives and experiences as part of the larger human experience (Bishop, 1990, p. ix).

Choosing books that mirror the lives of the students can provide dynamic opportunities to support students' ability to make personal connections and have critical conversations (Christ & Sharma, 2018). When books function as mirrors, readers see aspects of themselves reflected. For example, they may see physical or cultural reflections. Seeing characters that represent them physically helps readers feel like their life and culture is worthy of being discussed and celebrated (Myers, 2014). A mirror text can help students make connections to texts and sustain students' culture and identities, which in turn supports their motivation and literacy outcomes (Alim & Paris, 2017; Ladson-Billings, 1995).

In order to select culturally relevant texts that mirror the lives of diverse students, teachers need to know their students' lives and cultural backgrounds and search texts that depict the lives of the students they are teaching (Sharma & Christ, 2017). For example, the text could have a character that has the same race or religion of the student, or the setting of the book is similar to where the student has lived or visited.

Instructional on interactive read alouds. A key tenant of culturally responsive teaching is to provide learning experiences that provide students from diverse backgrounds with opportunities to actively engage with learning materials, peers, and teachers (Gay, 2002). Many students from culturally diverse backgrounds prefer to co-create meaning, engage in creative responses, and enjoy instructional variety and novel learning tasks (Gay, 2002). Delivering instruction in ways that consider diverse students' preferences can increase student motivation, engagement, and academic success (Gay, 2002).

Promoting student engagement. Utilizing instructional engagement techniques in reading lessons supports students' comprehension development. In their case study concerning a special education teacher who used culturally responsive instruction, Orosco and O'Connor

(2014) found that a teacher's instructional choices influence the 35 special education students' learning with whom she worked. The researchers gathered data from (a) 12 one-hour classroom observations that were conducted over the span of a school year, (b) three half-hour interviews with the classroom teacher, and (c) document analysis of the teachers' classroom artifacts such as instructional materials, lesson plans, and student work. Data were analyzed through an inductive coding process that included several rounds of coding. Examples of codes included communication and community involvement. Next, the researchers grouped discrete codes to identify themes such as *collaborative agency time.* Findings from the study highlighted that the instructional engagement that the special education teacher provided with read alouds and reading skill instruction that used interactive dialogue supported students reading skill development.

Instruction on how to promote student engagement with interactive read alouds.

Including instruction on interactive read alouds in teacher education reading courses can help PSTs become more equipped to engage diverse learners and help them develop their reading comprehension skills (Pendergast et al., 2015). The instructional practice of interactive read alouds values students' resources and background experiences while supporting their ability to comprehend the messages in the text (Pendergast et al., 2015). Interactive read alouds are defined as the act of reading aloud to students while encouraging students to verbally interact with the text and teacher during book reading with the goal of enhancing students' reading motivation and comprehension (Pendergast et al., 2015). The instructional practice of encouraging a co-created response to the text scaffolds students' reading comprehension (Pendergast et al., 2015). Response to texts could include verbal interactions between students and teacher or students with peers. Because interactive read alouds provide students with support

for negotiating the meanings found in texts, this instructional practice creates a rich learning context for students from culturally diverse backgrounds (Pendergast et al., 2015).

The quality of the student interactions during an interactive read aloud is contingent upon the teacher's ability to encourage and respond to the students' contributions and to create an inviting environment that supports students' active construction of meaning and high levels of engagement (Maloch & Beutel, 2010). In their qualitative study, Maloch and Beutel (2010) explored the interactions of 15 second grade students and their teacher during interactive read alouds. The study data sources included field notes, video and audio records and transcripts, and teacher interviews. The researchers inductively analyzed the data using a constant comparative method. Study findings revealed that when the teacher provided explicit prompting, the students were more actively engaged in thinking and talking about the text, and the students provided relevant contributions that revealed the connections they were making to the text. Study findings combined with research on effective read alouds prompted the researchers to recommend that teachers intentionally prepare read alouds with support and guidance to help students engage in collaborative meaning-making. In order to conduct an effective, this type of interactive read aloud, the teacher needs to develop a sophisticated set of strategies such as managing turn taking, responding to student contributions, and supporting student meaning-making (Pendergast et al., 2015). Professors of reading instruction courses can help PSTs develop some of these strategies by teaching PSTs how to assess students' linguistic skills, academic skills, and background knowledge (Pendergast et al., 2015).

Explanation of the read aloud pedagogy. Reading instructors should provide PSTs with explicit instruction on how to use read alouds to help develop diverse students' comprehension. In their study, Pendergast et al. (2015) investigated how an instructional emphasis on interactive

read-alouds in a literacy methods course influenced 20 PSTs' development of instructional strategies to support comprehension skill development of culturally and linguistically diverse students. In this study, PSTs enrolled in a literacy course participated in a field practicum where they tutored a student from a diverse cultural and linguistic background for twelve sessions. PSTs were taught how to conduct interactive read alouds and applied their learning during their field placement.

Pendergast et al. (2015) collected study data collected from field notes, transcripts from PSTs' lesson videotape transcripts, semi-structured interview transcripts, and PSTs' lesson plan reflections. Using the grounded theory method, the researchers inductively coded the data and identified themes. Pendergast et al.'s (2015) study revealed that PSTs attributed their success in effectively using the read alouds to support diverse students' comprehension to explicit instruction and modeling by the teacher educators and the opportunity to apply their learning in a diverse setting. However, Pendergast et al.'s (2015) study also revealed that two specific interactive read aloud skills supported PSTs' instructional effectiveness. PSTs specifically stated that reading the stories with effective prosody and giving students extended wait time supported student engagement and thinking. Prosody is defined as oral reading expression using variations in volume, pitch, pausing, duration, and word emphasis (Benjamin & Schwanenflugel, 2010). The study participant number, length of study, and embedded tutoring components of Pendergast et al.'s (2015) study align well with my professional context.

Explanation of language demands. Professors of reading instruction should also demonstrate how read aloud pedagogy can scaffold diverse students to navigate through the language demands of reading comprehension (Mitchell, Homza, & Ngo, 2012). Similar to Pendergast et al. (2015), Mitchell et al. (2012) investigated how a three-semester-long read aloud

project influenced nine PSTs' development of sensitivity to the specific learning needs of linguistically diverse learners. The researchers collected study data from observation notes and transcripts of interviews with PSTs, their cooperating teachers, and their college supervisors. In the initial stages of analyzing the data, the researchers identified emerging codes and then created categories. After an outside auditor reviewed the initial analysis, the researchers identified cross-cutting themes. Study findings revealed that detailed instruction and modeling combined with field experience supported PSTs' development of literacy instruction expertise with diverse learners. Specifically, PSTs grew in their ability to support students with comprehension language demands before, during, and after reading the text in order to facilitate student comprehension.

The findings from Pendergast et al.'s (2015) and Mitchell et al.'s (2012) underscore that when teacher educators provide supportive instruction paired with a field placement in a diverse setting, PSTs can better develop effective instructional read aloud protocols. The findings from both studies highlight that when PSTs experience quality read aloud learning experiences, they, in turn, can feel prepared to deliver a read aloud with the type of guidance and support that Maloch and Beutel (2010) found to help diverse learners engage in collaborative meaning-making.

Instruction on Adaptive Thinking Strategies

Teacher education programs that prepare teachers who are culturally responsive equip them with thinking strategies so they can later apply culturally responsive teaching practices with their future students (Villegas & Lucas, 2002). With growing ethnic and cultural diversity in the school population, PSTs need to be prepared to create and adapt curriculum and instructional procedures that provide relevant learning experiences for students from diverse backgrounds

(Gay, 2010). Developing the thinking strategies of metacognition (Griffith, 2017) and the thinking strategy of creativity (Harris & de Bruin, 2017) can help PSTs adapt their instruction to meet the learning needs of the students with whom they work.

Metacognition. Metacognition, the process through which an individual monitors their thinking for strategic problem solving and goal setting, helps individuals make good decisions and reflect on how they can improve (Flavell, 1979). Instruction that provides the changeable conditions in a real-world experience helps individuals learn to monitor their thinking and problem solve in-the-moment. An example of providing a learning opportunity for PSTs to actively monitor their thinking during reading instruction is found in Griffith's (2017) study of 97 PSTs attending a university in the southwest of England. During the course, Griffith (2017) taught the three steps of in-the-moment instructional decision making. First, Griffith (2017) explicitly modeled how to keenly observe students while they were reading. Then, Griffith (2017) modeled how to analyze the students' answers and artifacts. Following that, she modeled how to make instructional decisions based on the students' responses. Next, the PSTs went out to field placements to apply their instructional strategies with students. After each field experience, PSTs were asked to write about their in-the-moment instructional decisions.

Griffith (2017) found that 88% of the PSTs were able to make in-the-moment decisions to adjust their instruction to support the learner. For example, PSTs were able to provide comprehension support, motivation and encouragement, decoding strategies, and explanation of vocabulary words. This type of metacognitive monitoring helps PSTs develop their adaptive expertise (Griffith, 2017). It is not enough for PSTs to be able to state their teaching practices; they need to be able to problem-solve during reading instruction by adapting and responding to students' learning needs (Griffith, 2017).

Creativity. Teachers who intend to support the learning needs of diverse classrooms need to utilize creative thinking (Harris & de Bruin, 2017). In their article entitled *STEAM Education: Fostering creativity in and beyond secondary schools*, Harris and de Bruin (2017) present a case for how teaching the arts supports students' ability to develop creative and critical thinking. According to Harris and de Bruin (2017), thinking creatively can help teachers innovate and adapt teaching practices so instruction matches students' learning needs and equips the students to develop creative and critical thinking skills. Current educational concerns about equipping all learners with high-level thinking skills have moved creativity to prominence among educators (Harris & de Bruin, 2017). Creativity is defined as the ability to make connections between previously unconnected ideas (Koestler, 1964) to think in ways that lead to "original or adaptive ideas, solutions, or insights" (Runco & Chand, 1995, p. 244). Two methods of helping PSTs develop creativity are creativity instruction and provision of learning opportunities that encourage creativity.

Creativity instruction. Learning about the creative process helps PSTs engage in creative activities (Daly et al., 2016). PSTs' creativity development is influenced by the pedagogical approaches used to teach creativity. In their study to investigate how college students learn creativity, Daly et al. (2016) found that college students reported that instructional practices that offered practiced-based, cooperative, and open-ended activities supported their development of creative skills. In Daly et al.'s (2016) mixed-methods study, the researchers gathered data from the end of the year surveys given to 450 university college students enrolled in 19 courses from five different disciplines: Arts, Education, Engineering, Humanities, and Social Science. The survey contained two Likert-type rating questions and two open-ended questions. Quantitative data were analyzed using descriptive statistics. Qualitative data were coded, and themes such as

Critical Experiences and *Suggested Changes* were identified. Findings from the study indicate that students perceived that a supportive college classroom environment with pedagogical techniques such as group work, perspective-taking, and in-depth exploration of topics were helpful for their creative process development.

Engaging in creative classroom learning activities helps PSTs develop creative and innovative thinking skills that they may utilize in their future classrooms (Reynolds, Stevens, & West, 2013). Offering learning opportunities that practice creative thinking skills encourages PSTs to take risks, connect ideas, synthesize, and transform materials or ideas (Reynolds et al., 2013). In their study to investigate how creative assignments supported college students' creativity development, Reynolds et al. (2013) determined that students found creative assignments valuable. In Reynolds et al.'s (2013) study, 57 college students from three professional courses (business, higher education administration, and teacher education) took an end of the semester survey with 13 Likert scale questions and two qualitative questions concerning what students found helpful and how the creative assignments contributed to their learning. Quantitative data collected from the survey were analyzed through the calculation of means and standard deviation. Qualitative data were deductively coded, and themes were identified. Study findings indicate that creative learning opportunities help college students generate new insights and reflect on deeper levels.

Creative learning opportunities. Creative learning opportunities can assist PSTs to develop culturally responsive teaching skills. Kerry-Moran (2016) suggests that teacher educators provide PSTs with creative learning opportunities to guide them to develop expression in their read alouds. Creative use of enunciation, word emphasis, pitch, pace, and volume support

a high quality read aloud experience for students. High-quality read alouds can help convey meaning to students and promote student engagement (Kerry-Moran, 2016).

Creative learning opportunities that involve improvisation can also help PSTs develop culturally responsive pedagogy. Philip (2019) uses improvisation in a social justice course to support PSTs to learn how to navigate classroom experiences with students from diverse cultural backgrounds. During the course, the researcher read the PSTs' response journals and collected scenarios that PSTs experienced in their field experiences that accompanied the Social Justice course. Philip (2019) presented the scenario to the class, and then groups of PSTs collectively reimagined and presented innovative ways a PST could respond. According to Philip (2019), engaging in the improvisational activities helped PSTs process their classroom experiences and think innovatively on how they could respond.

Teaching PSTs thinking strategies can help them develop teaching practices that are responsive to students from diverse backgrounds (Villegas & Lucas, 2002). In particular, teaching PSTs metacognition can help them develop problem-solving and goal setting techniques, which can support their ability to make good decisions and reflect on how they can improve (Flavell, 1979). Similarly, teaching PSTs creative thinking can help them adapt and adjust their instruction to meet the learning needs of diverse students (Harris & de Bruin, 2017).

Infusing instruction on culturally responsive teaching into a reading methods course can help PSTs become prepared to teach reading comprehension to students from culturally diverse backgrounds (Barnes, 2006). Instruction on how to process underlying beliefs about teaching reading (Barnyak & Paquette, 2010), utilize culturally responsive pedagogy (Hill, 2012; Lazar, 2007; Sharma & Christ, 2017), and adapt their instruction (Daly et al., 2016; Griffith, 2017) can

equip PSTs to provide learning experiences that meet the learning preference and learning needs of culturally diverse students.

Critical Reflection

The practice of critical reflection helps PSTs develop a theoretical foundation for learning culturally responsive teaching pedagogy (Howard, 2003). Critical reflection involves examining the underlying assumptions of a given problem (Mezirow, 1998). PSTs may not engage in critical reflection without support (Howard, 2003). According to Howard (2003), teacher educators must assist PSTs to critically examine educational equity topics through a variety of critical reflection techniques that support PSTs' ability to incorporate issues of equity and social justice into their thinking and teaching practices (Howard, 2003).

Critical reflection topics. Critical reflection can help PSTs process their cultural lens and the beliefs they hold about teaching diverse students (Gay & Kirkland, 2003). The practice of critical reflection helps PSTs focus their attention on their past experiences and underlying beliefs associated with those experiences. Also, critical reflection can help PSTs realize that these beliefs act as a filter for new learning and influence future decision making (Howard, 2003). In order to effectively learn and implement culturally responsive teaching, PSTs need to develop a sense of who they are as people, understand the contexts in which they teach, and work through their beliefs and assumptions about teaching diverse students (Gay & Kirkland, 2003).

Critical reflection supports PSTs' development of their commitment to learn and implement culturally responsive teaching pedagogy to they are better able teach diverse learners with excellence (Howard, 2003). Teacher educators need to help PSTs develop a commitment toward diverse students' academic success and emotional well-being (Gay, 2002). This

commitment involves developing a sense of mission to serve ethnically diverse students to the best of their abilities, providing equitable learning opportunities with different instructional techniques and frameworks, and expressing a passion for providing a caring and supportive classroom community for all students (Gay, 2002). Helping PSTs develop the commitment to teach students from diverse cultural backgrounds should be the core of teacher education programs so that PSTs will be prepared for future instructional decisions that will support the academic success of the diverse students they will work with (Gay, 2002).

Reflection techniques. Teacher educators can offer a variety of instructional supports to help PSTs work through their racial, ethnic, and cultural beliefs both as a person and a professional. These techniques can include cooperative inquiry, autobiographical work, or personal narrative reflection (Gay, 2010). Gay (2010) shares that PSTs who engaged in critical reflection writing assignments while enrolled in her courses have taken definitive steps toward identifying and transforming their beliefs about cultural diversity.

Cooperative inquiry. Cooperative inquiry is one type of support that teacher educators can use to help PSTs critically reflect on what it means to create supportive educational experiences for students from diverse backgrounds (Seidl, 2007). During a two-semester cross-cultural internship situated in an after-school tutoring program**,** Seidl (2007) used cooperative inquiry with 14 PSTs to help them develop critical consciousness as they engaged with students and teachers who participated in the internship. Her recursive cooperative inquiry process challenged PSTs to grow and transform their thinking through a three-step process of scripting their personal experience in their practicum, sharing and discussing their story within a small group during class, and then later discussing a few selected aspects of PSTs' stories with the whole class.

During the whole class discussion, the instructor and PSTs collaboratively interpreted the stories through the lens of their class readings. Study data were collected from written reflections, which were inductively coded and analyzed for themes. Study findings revealed that PSTs who explored the development of critical consciousness using the cooperative inquiry process developed a deeper understanding of the importance of holding high expectations for students and the importance of getting to know their students so they would be able to construct meaningful lesson plans. The cooperative inquiry format used in Seidl's (2007) study connects with the structure of the advanced reading course in my professional context. In addition, Seidl's (2007) small scale 14 participant study, length of study, and embedded tutoring component with elementary students compare to my professional context.

Autobiographical work. Teacher educators can also engage PSTs in autobiographical work, which helps them recognize their own cultural identity through an exploration of their backgrounds and socialization (Nieto, 2000). During a one-semester course, Boyd and Noblit (2015) investigated how 60 PSTs' sense of critical consciousness was heightened through the process of writing an autobiography as part of a Social Justice in Education course. After attending the first class, PSTs were asked to submit their first iteration of a personal autobiography that included five critical moments in their educational experiences that collectively gave a picture of their educational history. During the semester, PSTs engaged in weekly readings, class discussions, and weekly written reflections on social justice topics. The culminating assignment of the course required PSTs to critique their original autobiography.

For this qualitative study, collected data from the original autobiography and the final critique were inductively coded and categorized. During further analyses, the researchers identified themes such as recognition of privilege and recognition of meritocracy beliefs. The

findings of the study revealed that engaging in the two iterations of the autobiography allowed PSTs to tell their story and recognize their social lens. The autobiography process also helped PSTs critique how power and privilege worked in their lives. In particular, they were able to name underlying beliefs such as meritocracy and were able to recognize how some educational practices benefited some students more than others.

Personal narrative reflections. Writing personal narratives also provides opportunities for PSTs to become critically conscious of their attitudes and beliefs about cultural diversity (Cochran-Smith, 2000). Personal narratives are an option that can be innovatively adapted to open up avenues for critical reflection in ways that are less threatening to PSTs (Boyd & Noblit, 2015). Gay (2010) found that using creative personal narrative assignments increased PSTs' engagement and thoughtfulness. For example, Gay (2010) adapted traditional personal narratives into poetry about or a metaphor for their cultural development journey.

Teacher educators can also use reflection activities to help PSTs develop reflective practices. As part of their mixed-method investigation, Kyles and Olafson (2008) used personal narratives to explore how the combination of reflective practice and diverse field placements could help 15 PSTs process their beliefs about teaching diverse students. The researchers collected quantitative data from the following three sets of pre-and post-tests: Hope Scale, Motivation for Teaching Scale (Schraw & Olafson, 2002), and Teacher Efficacy Scale: Short Form (Hoy & Woolfolk, 1993). Correlation analysis was conducted to find the strength of the relationship between the variables, such as personal beliefs about diversity and general teaching efficacy. The researchers also collected qualitative data from participants' weekly personal narrative reflections, which they inductively coded and analyzed. Following that, the researchers identified underlying themes.

Study findings revealed that the combination of field experience and reflections did not increase PSTs' self-efficacy to teach diverse students. However, the combined experience did help PSTs uncover their underlying beliefs about teaching diverse students. Those participants (n=10) who had prior multicultural experiences developed a more-in-depth critical consciousness that recognized the value and importance of using culturally responsive teaching pedagogy to support diverse students than those participants (n=5) who had limited prior multicultural experiences.

Seidl's (2007), Boyd and Noblit's (2015) and Kyles and Olafson's (2008) studies use instructional practices that provide PSTs with guidance and support to engage in critical reflections. In all three studies, the specific supports provided by the teacher educator enabled PSTs to engage in higher levels of thinking that prepared them to teach in diverse settings. In Seidl's (2007) study, the PSTs recognized the importance of holding high expectations for students as well as the importance of getting to know their students so they could provide targeted instruction. Comparatively, in Boyd and Noblit's (2015) study, PSTs were able to identify their underlying beliefs about teaching diverse students and consider how some educational practices favored some students more than other students. Whereas in Kyles and Olafson's (2008) study, PSTs who engaged in reflection activities combined with a field experience developed higher levels of self-efficacy to teach diverse students. In each study, reflection activities used by the teacher educators supported PSTs preparedness to teach students from diverse cultural backgrounds.

Teacher education programs must teach and model how to implement exemplary literacy practices in today's diverse elementary classrooms (Barnyak & Paquette, 2010). In particular, teacher education programs need to equip PSTs to teach reading instruction in ways that value

and build upon on the cultural and linguistic strengths students bring to the classroom, and their cultural and linguistic competence garnered from their families and communities (Caughlan & Cushman, 2013). In addition to building on students' strengths, culturally relevant teaching pedagogy provides instruction, modeling, and scaffolding for all students so they can become independent learners who can think critically, problem-solve and read with high levels of comprehension (Hammond, 2015). In order to help PSTs develop culturally responsive literacy pedagogy, teacher education reading instruction programs must address PSTs' beliefs about teaching literacy and provide instruction on cognitive strategy instruction and culturally relevant text selection (Barone & Morrell, 2007).

Culturally Diverse Field Placements

Researchers assert that field placements in culturally diverse settings support PSTs' understanding and development of culturally responsive teaching pedagogy (Castro, 2010; Conway, Browning, & Purdum-Cassidy, 2007, Wiggins, Follo, & Eberly, 2007.) Participation in field experiences with students from diverse cultural backgrounds helps PSTs make deeper connections between culturally responsive teaching course material and practical application of culturally responsive teaching in the classroom (Morton & Bennett, 2010). Field placements also provide PSTs with an opportunity to further develop their perspective of teaching culturally diverse students and give PSTs opportunities to apply culturally responsive pedagogy (Morton & Bennett, 2010).

Support for development of preservice teachers' perspective of students.

Participation in field experiences helps PSTs adjust their perspectives about teaching diverse students as they build relationships with students in their field placement (Bennett, 2012). The experience of teaching diverse students during a field experience supports PSTs to develop

empathy for the students they teach. Field experiences can also help PSTs identify and utilize students' strengths as well as aid PSTs to alter their expectations of students.

Development of heightened empathy. Field placements can help PSTs develop heightened empathy toward individuals from backgrounds different from their own and recognize these students' strengths (Bennet, 2012). In his qualitative study, Keengwe (2010) investigated 28 PSTs' perceptions of how participation in a diverse field placement helped prepare them to teach students from diverse backgrounds. Each of the 28 PSTs was enrolled in a multicultural education course that had a field placement component of working with an elementary ELL student from the college's English Language Learning Center. PSTs engaged in English language learning activities with their tutee for an hour each week for ten weeks. The researcher collected data from PSTs' final written reflections.

Keengwe (2010) found that PSTs who spent an hour a week tutoring a student from a diverse cultural background shifted their perceptions about who the student was and helped PSTs identify the strengths students brought to learning tasks. Initially, the PSTs in Keengwe's (2010) study viewed their tutee with some fear and negative assumptions that their student would struggle with academic tasks. However, after working with their student for one hour a week for ten weeks, many PSTs began to view their tutee as an individual with strengths that they could bring to a learning task. A study limitation involves the researcher's lack of provision of specific details concerning his analysis process. However, Keengwe's (2010) findings add to the academic conversation of how field experiences benefit PSTs' professional growth and enhance their learning.

Development of the ability to identify and utilize students' strengths. Field placements can also help PSTs develop their ability to identify and utilize student's strengths to learn new

content and skills (Morton & Bennett, 2010). In a study similar to Keengwe's (2010), Morton and Bennett (2010) conducted a qualitative study to investigate how PSTs' experience tutoring students from culturally diverse backgrounds influenced their ability to identify and teach to students' strengths. While engaging in a diverse field placement that was attached to a writing methods course, the 39 study participants were surprised that their tutees demonstrated abilities beyond what they had predicted when they first met them. During the study, Morton and Bennett (2010) collected data from observation transcripts, interview transcripts, and PSTs' reflection journals. The researchers inductively coded the data and identified underlying themes. For example, one reoccurring theme was "Understands student's needs" (p. 142).

Similar to the PSTs in Keengwe's (2010) study, Morton and Bennett's (2010) study findings revealed that PSTs experienced shifts in their perspectives concerning their tutee's learning potential over the semester. Over the semester, the PSTs grew to view their student as motivated and capable with strengths they use to help them become skilled writers. Also, as their perceptions shifted, the PSTs assessed their students' learning more closely and adjusted than their lessons to better match their students' learning preferences and interests. The study length and embedded field placement of Morton and Bennett's (2010) study aligns well with my professional context because the advanced reading course that I teach is a semester-long and has a field experience attached to it.

Adjustment of expectations. Field experiences can also help PSTs adjust their expectations of students from diverse cultural backgrounds (Nash, 2018). Through the use of narrative inquiry, Nash (2018) also explored PSTs' developing dispositions for teaching diverse students as they engaged in diverse field placements while enrolled in two consecutive early childhood literacy courses. The researcher collected data from the transcripts of three

phenomenological interviews with four PSTs. Taking a critical race stance, Nash (2018) inductively analyzed the data, coded the data for patterns, and identified underlying themes. A few samples of themes include "Getting to know students individually" (p. 163), "Seeing color, seeing culture" (p. 164), and "Including 'mirror and window' texts" in lessons (p.164). These themes reveal PSTs' shifting expectations for students as PSTs move from focusing on the assumptions of academic ability based on ethnicity to expectations based on experience with the student. Similar to Keengwe's (2010) and Morton and Bennett's (2010) findings, Nash's (2018) study findings revealed that the combination of course instruction and practical experience in diverse field placements helped PSTs adjust their expectations of the student as they discovered the student's strengths which could be leveraged to learn reading skills.

The findings from all three of these studies highlight how tutoring students from diverse cultural backgrounds while enrolled in literacy methods courses can help PSTs learn to view students through their strengths and recognize their learning potential. This shift in perspective not only helps PSTs adjust their disposition towards students from diverse cultural backgrounds, but it also propels them to adjust their expectations and instruction for diverse students (Nash, 2018). As PSTs adjust their lessons to include strength's based instruction, the students, in turn, are more responsive to the instruction (Nash, 2018).

Support for development of preservice teachers' culturally responsive pedagogy. Field placements attached to an education course can also help PSTs make connections between the pedagogy taught and modeled in the course and practical application in the classroom by providing them opportunities to apply the pedagogy in authentic settings (Bennett, 2012). Field placements help PSTs transition from an academic context where they function as students to a classroom context where they function as teachers (Retallick & Miller, 2010). Pairing reading

instruction coursework with diverse field placements provides PSTs with valuable opportunities to refine their instructional beliefs and develop their instructional skills that support diverse learners to become independent thinkers and readers (Lazar, 2007).

Support for reading instruction skills. The supervised practice of teaching reading during a field placement allows PSTs to grow and change in their understanding of best practice literacy instruction as they apply what they have learned in their coursework with students in a school context (Lipp & Helfrich, 2016). In their study of PSTs' growth in understanding of and beliefs about best practice in literacy instruction, Lipp and Helfrich (2016) found that pairing coursework with field placements enhanced PSTs' understanding of effective reading instruction techniques. The study participants consisted of 11 PSTs enrolled in a one-semester reading course with an attached field placement in a primary elementary classroom. The researchers collected data from pre- and post-surveys and two reflection assignments. The survey tool consisted of open-ended questions and Likert scale questions concerning the importance of using reading instruction strategies. The researchers coded the data from the open-ended survey questions and reflections. Following that, the researchers compared the pre and post scales to identify changes in PSTs' beliefs concerning the importance of instructional strategy use. The researchers provided rich text evidence to support their claims, but they did not provide many details about their analysis process. Study findings revealed that as a result of participating in a field placement, PSTs felt more confident in explaining, defending the importance of, and implementing the instructional techniques because they had the opportunity to apply their course learning with learners in a school setting.

Support for culturally responsive instruction. Field placements can also help PSTs develop instructional skill that support the unique learning needs of students from diverse

cultural backgrounds (Bennett, 2012). In her case study with eight PSTs, Bennett (2012) investigated which field placement components facilitated the development of culturally responsive teaching pedagogies. While enrolled in a writing instruction course, the eight study participants tutored culturally diverse elementary students in writing skills during an afterschool program. The researcher collected data from various course documents such as weekly written reflections, written field notes, and transcripts from participant interviews. During the analysis of the data, Bennett (2012) used a constant comparison method to uncover central themes and categories. Study findings revealed that the student-teacher interactions during one-on-one tutoring sessions in the field placement and scaffolded critical reflections supported PSTs' development of culturally responsive teaching pedagogies.

Conclusion

Theoretical and empirical evidence suggest that many White PSTs enter their teaching practicums with a collection of beliefs, knowledge, and pedagogical skills that may be a cultural mismatch for learners from diverse backgrounds (Castro, 2010). This cultural disconnect is highlighted in the problem of practice concerning PSTs' preparedness to teach reading comprehension to elementary students from culturally diverse backgrounds. The results of my needs assessment findings are consistent with empirical research in that they reflect Mason University's (MU) PSTs' underdeveloped knowledge, skill, and self-efficacy to support students from diverse cultural backgrounds in their reading development. PSTs at MU lack awareness of who they are as people and their beliefs and assumptions about teaching diverse students, which Howard (2003) terms critical consciousness. Similarly, PSTs at MU lack knowledge on how culture influences teaching and learning. Finally, findings indicate that PSTs at MU have

underdeveloped pedagogical skills that equip diverse learners to become independent learners and problem solvers.

Self-efficacy theory informs a possible intervention that incorporates culturally responsive teaching instruction within a reading instruction methods course to support PSTs in their development of knowledge, skill, and self-efficacy to effectively teach reading comprehension to students from diverse cultural backgrounds (Lazar, 2007). Culturally responsive teaching is grounded in the belief that students' strengths, such as their ways of knowing, language, cultural background knowledge, and learning preferences, can be leveraged to help them learn new concepts and skills (Gay, 2010). An effective culturally responsive teaching instruction intervention should include multiple instructional components such as critical reflection activities where PST receive guided reflection protocols (Howard, 2003), direct course instruction where teacher educators teach about and model culturally responsive reading instruction (Christ & Sharma, 2018), and diverse field placements that offer PSTs the opportunity to apply and extend their learning (Lazar, 2007). Elements of the Lazar's (2007), Seidl's (2007), Christ and Sharma's (2018), Pendergast et al.'s (2015), and Morton and Bennett's (2010) studies inform the study design to address my problem of practice.

Proposed Intervention

In accordance with the literature review, the proposed intervention will be infused in an advanced level reading methods course and contains the following components: 10 research-based instruction lessons on teaching reading within a culturally responsive framework, 12 field placement experiences in a diverse setting, and nine learning activities paired with critical reflection. Each direct instruction lesson and reflection activity will occur during a 30-minute

time block of the two-hour reading methods course instructional time block. Each of the 10 field experiences will last for the duration of an hour.

The 10 research-based lessons presented during reading methods course time will focus on culturally responsive teaching, reading instruction situated within a culturally responsive framework, and reading instruction techniques that support reading comprehension of students from diverse backgrounds. Some of the lesson topics include culturally responsive teaching components, selecting culturally responsive texts, and supportive read aloud protocols.

The field placements will be held at a partner elementary school. Each PST will be partnered with a second or third grader from a culturally diverse background. PST's will tutor their student in reading comprehension through a culturally responsive teaching framework for one hour each week. The PST will apply their culturally responsive teaching and reading instruction knowledge and skills through the creation and implementation of reading comprehension lessons situated in a culturally responsive framework.

For ten weeks, the PSTs will engage in a reflection activity directly after their tutoring experience for a half hour. The PSTS will meet in a large meeting room in the partnerships school. Each reflection activity will involve a fifteen-minute lesson prompt and fifteen minutes of collaborative reflection.

Chapter 4

Intervention Procedure and Program Evaluation Method

As the needs assessment revealed, PST's at Mason University struggle to understand how a student's cultural background influences their knowledge construction and acquisition. These findings were aligned with findings from the literature review that revealed that many teacher education programs need to provide PST's with culturally responsive teaching learning opportunities in order to prepare them to effectively teach students from diverse backgrounds (Castro, 2010; Sleeter & Owuor, 2011). Culturally responsive teaching supports the academic development of students from diverse cultural backgrounds, and makes learning more meaningful by teaching to and through children's cultural strengths, their cognitive capabilities, and their prior experiences (Gay, 2010). As the intervention literature demonstrates infusing culturally responsive teaching into a reading instruction methods course supports PSTs' ability to teach reading comprehension to elementary students from diverse backgrounds (Christ and Sharma, 2018; Lazar, 2007; Seidl, 2007)

Statement of Purpose

The purpose of this intervention was to increase preservice teachers' (PSTs) knowledge, skill, and self-efficacy to teach reading comprehension to elementary students from diverse cultural backgrounds. Needs assessment findings from spring 2018 (see chapter 2) revealed that the Mason University teacher education (MUTE) program does not provide adequate multicultural education instruction to equip PSTs with the knowledge and skill to teach students from diverse cultural backgrounds. In particular, the MUTE program has not adequately educated MU PSTs to recognize the need for students from diverse cultural backgrounds to engage in learning experiences that help them to become self-directed learners or assist them to

think, and problem-solve on their own. Also, the needs assessment indicated that Mason University (MU) PSTs misunderstand how a student's cultural background influences their thinking and learning. This lack of understanding causes MU PSTs to misinterpret students from diverse cultural backgrounds as dependent learners and inhibits them from taking responsibility to adapt their lessons to support students from diverse cultural backgrounds to become self-directed learners or equip them to think and problem solve on their own. In response to these needs, and in combination with empirical evidence on how research-based instruction, critical reflection, and diverse field placements (Lazar, 2007) supports PSTs' development of knowledge, skill, and self-efficacy to teaching reading comprehension to diverse students, the Culturally Responsive Reading Instruction Intervention (CRRII) was created.

The four-month CRRCII was infused in an advanced level reading methods course that met for two hours each Tuesday and Thursday morning for fourteen weeks. This course is the second of two required reading methods courses in the MUTE elementary education program. On Tuesdays, this course met in a university classroom during which a CRRII instructional component was taught for a half-hour during the two-hour instructional-block. On Thursday mornings, the course met at a partnering elementary school during which PSTs tutored a student during the first hour and meet in a university methods classroom to engage in critical reflection activities for the following hour. The CRRII was informed by literature related to sociocultural learning theory (Gee, 2008; Vygotsky, 1978) and culturally responsive teaching (Gay, 2013; Hammond, 2015; Siwatu, 2007; Villegas & Lucas, 2002). This intervention sought to provide PSTs with a supportive learning environment to develop their knowledge, skill, and self-efficacy to teach reading comprehension to diverse students through learning experiences in their reading

content course and strategic field placements. Later sections of this dissertation provide detailed explanations of each intervention component.

Research Questions

The outcome evaluation of the CRRCII revealed the changes in PSTs' knowledge, skill, and self-efficacy to teach reading comprehension to students from diverse cultural backgrounds. Specifically, the outcome evaluation sought to answer the following research questions:

- How does PSTs' knowledge to teach reading comprehension to elementary students from diverse cultural backgrounds change through participation in the CRRCII?
- How does PSTs' skill to teach reading comprehension to elementary students from diverse cultural backgrounds change through participation in the CRRCII?
- How does PSTs' sense of self-efficacy to teach reading comprehension to elementary students from diverse cultural backgrounds change through participation in the CRRII?

Also, the process evaluation assessed CRRCII implementation fidelity through an examination of the intervention process and procedures that support PSTs' ability to infusion of reading comprehension knowledge and skill during their field experiences and support PSTs' growth in self-efficacy to teach reading comprehension to students from diverse cultural backgrounds. Specifically, the process evaluation sought to answer the following research questions:

- Did preservice teachers receive the full amount of learning experiences to support growth in their skill level and self-efficacy to teach reading comprehension to elementary students from diverse cultural backgrounds?
- Were the preservice teachers satisfied with the instructional components they experienced in the CRRCII?

Intervention Research Design

Using a convergent parallel, mixed methods design, the evaluation of the CRRCII concurrently utilized (a) quantitative survey data to determine PSTs' self-efficacy to teach reading comprehension to students from diverse cultural backgrounds as well as quantitative data from observation checklist to determine PSTs increased their knowledge and skill to teaching reading comprehension to students from diverse cultural backgrounds and (b) qualitative data from PSTs lesson plans, critical response journals, and focus group interview transcripts to investigate PSTs' growth in knowledge, skill, and self-efficacy to teach reading comprehension to students from diverse backgrounds (Creswell & Clark, 2011; Onwuegbuzie & Leech, 2006). The following section describes the outcome evaluation research design and theory of treatment (ToT), as well as the process evaluation of the CRRII.

Outcome Evaluation

Research evaluation designs consider anticipated outcomes as well as the effectiveness and the efficiency of the process utilized to stimulate these outcomes (Rossi, Lipsey & Freeman, 2004). Enhanced preparedness of PSTs to adequately equip diverse learners with skills and strategies to comprehend a wide range of texts is the anticipated long-term impact of the CRRCII as presented in the logic model (See Figure 7). Adjusting beliefs about teaching diverse students, developing culturally responsive reading comprehension knowledge and skill, and increasing self-efficacy to implement these skills with diverse learners all require time and may not be consistently evident within the four-month time frame of this intervention evaluation. (Barnes, 2006; Lazar, 2007). Subsequently, the outcomes for the evolution of this intervention are "precursors" of these developments, specifically in MU PSTs' growth in culturally responsive reading comprehension instruction knowledge and skill as well as their increased self-efficacy to

apply their culturally responsive reading comprehension instruction knowledge and skill with a diverse learner (See Appendix C for evaluation matrix). These short-term goals are measurable within the three-month time block of the CRRCII and have been found to promote PSTs' professional growth (Caughlan & Cushman, 2013). Preservice teachers culturally responsive teaching knowledge was assessed through analysis of reflection journals and focus group interviews, PST's culturally responsive reading instruction skill was assessed through analysis of interview data and scores from the Equitable Tutoring Practices Observation Checklist. PST's culturally responsive teaching self-efficacy was assessed through analysis of interview data, reflection journals, and scores from the Culturally Sustaining Reading and Writing Pedagogy Self-Efficacy Scale (See Appendix C) (Caughlan & Cushman, 2013).

Theory of Treatment

Per the sociocultural theory, learning is enhanced with the provision of supportive learning contexts with opportunities to learn from peers (Vygotsky, 1978). Built on these theoretical tenets, the study's theory of treatment posits that PSTs' engagement in culturally responsive reading comprehension learning experiences with peers, field experiences with students from culturally diverse backgrounds, and collaborative reflection activities will increase their knowledge and skill level to teach reading comprehension to students from diverse cultural backgrounds. In addition, PSTs will increase their self-efficacy to implement appropriate text selection (Sharma and Christ, 2017), read aloud protocols (May, Bingham, & Pendergast, 2014), and cognitive strategy instruction (Bui & Fagan, 2013; Hill 2012) to support the reading comprehension of students from diverse cultural backgrounds during a field experience.

Design

Quality culturally responsive reading comprehension learning experiences paired with applied learning experiences with diverse students and reflection opportunities help PSTs grow in their knowledge and skill to teach reading comprehension to students from diverse backgrounds (Barnes, 2006; Lazar, 2007). As the logic model in Figure 7 displays, engagement in learning activities situated in a collaborative classroom, as well as an elementary school context, provided 15 Mason University PSTs opportunities to develop culturally responsive reading comprehension instructional knowledge and skill (See Figure 7).

This research is situated within a reading instruction course including three main components (a) professional instruction on culturally responsive reading comprehension instruction (b) field experiences with students from culturally diverse backgrounds, and (c) critical reflection learning experiences. The combination allowed PSTs to deepen their culturally responsive reading comprehension instruction learning and self-efficacy. The three critical components of professional instruction, field experience, and reflection experiences are presented in the CRRCII Logic Model (See Figure 7).

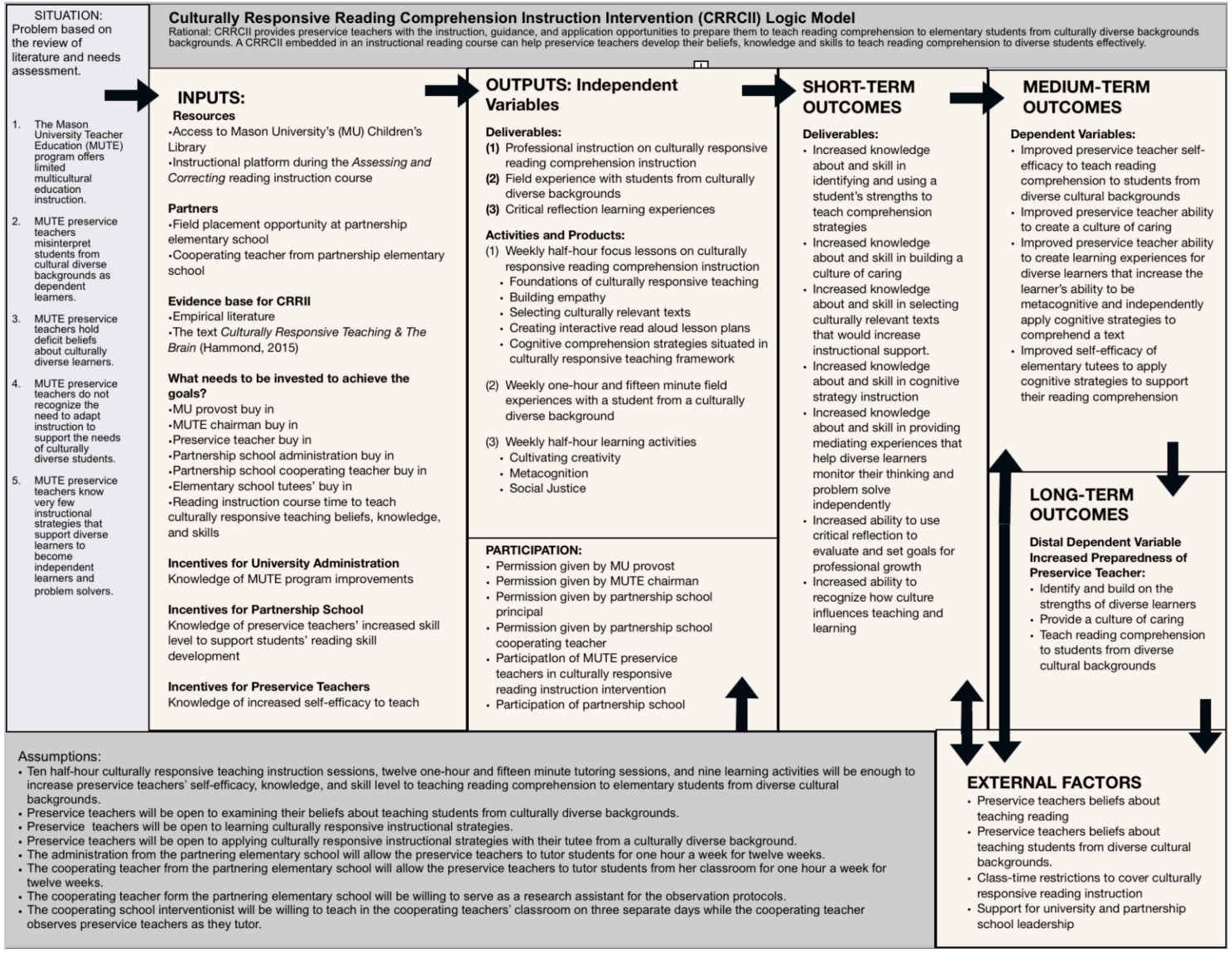

Figure 7. Culturally Responsive Reading Comprehension Instruction Intervention Logic Model.

Process Evaluation

An evaluation of improved knowledge, skill level, and self-efficacy to teach reading comprehension to students from culturally diverse backgrounds will not provide conclusive evidence for the CRRCII effectiveness without an evaluation of fidelity implementation. The process evaluation plan for this study supported systematic analyses of the fidelity of the implementation of the CRRCII. The process evaluation plan was administered to assess the CRRCII both formatively during implementation and summatively when the intervention was completed. The formative evaluation supported the adaptations of program procedures or process to address needs that arose. The summative evaluation helped assess the effectiveness of the intervention and provided insights concerning the study findings. The analysis involved reflection on two implementation fidelity components: participant responsiveness, the degree to which participants responded to the CRRCII components and implementation dose, the amount of CRRCII components presented to and received by participants (Dusenbury, Brannigan, Falco & Hansen, 2003).

The CRRCII was judged to be fully implemented if 100% of the PSTs enrolled in the advanced reading methods course (n =10) actively engaged in all three components of the intervention: (a)10 focus lesson on culturally responsive reading comprehension instruction (b) 12 field experiences with students from culturally diverse backgrounds, and (c) nine learning activities paired with critical reflection. Implementation fidelity was considered low if less than 85% of the participants were actively engaged in all three intervention components. Failure to complete more than nine lesson plans or tutoring lessons during the field experience by any participant would also reflect low fidelity. To evaluate implementation fidelity, the attendance

rosters and participant lesson plans were collected and analyzed. Analysis of these documents provided evidence for adherence to and completion of the CRRCII.

For this intervention, the output focus was the development of PSTs culturally responsive knowledge, skill, and self-efficacy to teach reading comprehension to students from diverse cultural backgrounds. Consequently, an analysis of the dosage received depended on a review of lesson plans, observation checklists, and focus interview transcripts for evidence of culturally responsive knowledge, skill, and self-efficacy. The process evaluation indicated intervention implementation fidelity through an assessment of whether PSTs were able to infuse appropriate text selections, reading comprehension strategies, and read aloud protocols in their lesson plans and tutoring sessions during their field experience as well as demonstrate the use of metacognition concerning the rationale for instructional choices. Also, the process evaluation indicated intervention implementation fidelity if CRRCII the process and procedures of the provided learning experiences supported PSTs self-identified satisfaction.

Method

Participants and Recruitment

All ten PST's enrolled in the advanced level reading instruction methods course for the Fall 2019 semester were eligible to participate in the CRRII. No students were excluded. Nine of the participants' ages ranged from 19 to 22 years of age, and one participant was 45 years old. All of the participants were either in their junior or senior year of college. On the first day of this advanced level reading methods course, an announcement and explanation of the study were presented. Following the presentation, students were invited to participate. A sign-up sheet and consent forms were then distributed for PSTs to complete to indicate agreement for participation in the study.

Measures and Instrumentation

This section describes the data sources for the variables that were examined in the study, including surveys, observation checklists, reflection journals, and interview protocols. The study's constructs, related variables, and operational definitions are listed in the Logic Model (See Figure 7). The constructs (Figure 8) of culturally responsive teaching knowledge, culturally responsive teaching skill, and teaching self-efficacy were fundamental to the CRRCII's outcome evolution. Culturally responsive teaching knowledge is defined as knowledge concerning instructional methods that use the cultural knowledge, prior experiences, frames of reference, and performance styles of culturally diverse students in order to make learning experiences more relevant and effective for them (Gay, 2010). Three primary components of culturally responsive teaching knowledge associated with reading comprehension instruction include culturally relevant text selection, read aloud protocols, and cognitive strategy instruction (See Figure 8). Culturally responsive teaching skill is defined as the ability to implement instructional methods that use the cultural knowledge, prior experiences, frames of reference, and performance styles of culturally diverse students in order to make learning experiences more relevant and effective for them**.** The four central components of culturally responsive teaching skill associated with reading comprehension instruction include selection of culturally relevant texts, engagement in read aloud protocols, instruction of cognitive strategies, and monitoring cognition (See Figure 8). Culturally responsive teaching self-efficacy is defined as a belief in the ability to impact diverse students' learning using culturally responsive teaching methods, which in turn motivates the individual to put more effort into helping students reach their highest learning potential (Gay, 2010; Tschannen-Moran & Hoy, 2001).

This Culturally relevant text selection (Sharma and Christ, 2017), read aloud protocols (May et al., 2014), and cognitive strategy instruction (Bui & Fagan, 2013; Hill, 2012) serve as outputs in this study. The short-term outcomes of the study focus are knowledge, skill, and self-efficacy of PSTs to teach reading comprehension to students from diverse cultural backgrounds. Changes in the outcome variables of culturally relevant text selection, read aloud protocols, and cognitive strategy instruction measured PSTs' culturally responsive teaching knowledge and skill (See Figure 8) Changes in PSTs self-reported self-efficacy to teach reading comprehension to diverse learners measured PSTs' culturally responsive teaching self-efficacy (See Figure 8). Cross comparison of quantitative data from pre-and post-survey responses and observation protocol checklists as well as qualitative data from interview transcripts and document analysis of lesson plans provided a more complete picture of how the CRRII influenced PSTs' professional development and corroboration of study findings through triangulation of data (Creswell & Clark, 2018).

Construct	Operational Definitions	Related Variables	Operational Definitions
Culturally Responsive Teaching Knowledge	Knowledge concerning instructional methods that use the cultural knowledge, prior experiences, frames of reference, and performance styles of culturally diverse students to make learning experiences more relevant and effective for them (Gay, 2010)	Culturally Relevant Text Selection	Selection of texts contain characters, settings, and experiences that are culturally relevant to the reader to support the readers' ability to monitor their comprehension and interpret what they read (Sharma & Christ, 2017)
		Read Aloud Protocols	Read aloud procedures that support students from culturally diverse backgrounds to actively engage with, think critically about, and authentically respond to a text (May, et al., 2014)
		Cognitive Strategy instruction	Reading compression instruction that teaches specific comprehension strategies within a culturally responsive teaching framework. These cognitive strategies enable students from culturally diverse backgrounds to build on their background

			knowledge to enhance their reading comprehension (Bui & Fagan, 2013; Hill, 2012)
Culturally Responsive Teaching Skill	Skill to implement instructional methods that use the cultural knowledge, prior experiences, frames of reference, and performance styles of culturally diverse students in order to make learning experiences more relevant and effective for them (Gay, 2010)	Culturally Relevant Text Selection	Selection of texts contain characters, settings, and experiences that are culturally relevant to the reader in order to support the readers' ability to monitor their comprehension and interpret what they read (Sharma & Christ, 2017)
		Read Aloud Protocols	Read aloud procedures that support students from culturally diverse backgrounds to actively engage with, think critically about, and authentically respond to a text (May, et al., 2014)
		Cognitive Strategy Instruction	Reading compression instruction that teaches specific comprehension strategies within a culturally responsive teaching framework. These cognitive strategies enable students from culturally diverse backgrounds to build on their background knowledge to enhance their reading comprehension (Bui & Fagan, 2013; Hill, 2012)
Self-Efficacy	An individual's belief in his or her ability to influence or produce a desired outcome (Bandura,1986).	Culturally Responsive Teaching Self-Efficacy	An individual's belief in his or her ability to impact diverse students' learning using culturally responsive teaching methods, which in turn motivates the individual to put more effort into helping students reach their highest learning potential (Gay, 2010; Tschannen-Moran & Hoy, 2001).

Figure 8. Constructs, Related Variables, and Operational Definitions.

Interview protocol. The ten PSTs were divided into three groups (two groups had three participants and one group had four participants). Each interview group met for 15 minutes once a month at the partner school after the field experience. The semi-structured interview protocol, based on Fowler's (2009) interview protocol methods involved recording the interview using a computer, asking participants prepared questions (See Appendix F), and asking probing questions during the interview for clarification or extension of participant responses.

Reflection journals. After participating in the weekly reflection learning activities, PST's were given dialogue prompts to talk about in small groups. An example of a dialogue prompt is How does knowing more about how culture influences learning impact how your plan learning experiences for the student you are working with? Preservice teachers were asked to write a reflection on their response to the content of the reflection activity and their teaching experiences for that week. Reflections were expected to be at least two paragraphs and were written by PST's on their own time.

Equitable Tutoring Practices Observation Checklist. The Equitable Tutoring Practices Observation Checklist was adapted from Montgomery County Public Schools' Equitable Classroom Practices List (Equity Initiatives Unit, 2010) (See Appendix C). The Montgomery County 27- item list was initially created to present observable teacher behaviors that support the learning outcomes of students from ethnically, racially, and culturally diverse backgrounds (Equity Initiatives Unit, 2010). The list was adapted to create the ten-item observation protocol because the intervention participants tutor only one student in a field experience. For example, an item that was excluded because it applied to a whole class was "arranges the classroom to accommodate discussion and structures heterogeneous and cooperative groups for learning." An item that was included was "the preservice teacher identifies the student's current knowledge before instruction" (Equity Initiatives Unit, 2010). Each of the 10 items on the checklist is a research-based instructional strategy that supports the learning outcomes of students from diverse cultural backgrounds, including the use of a) culturally relevant texts (Sharma & Christ, 2017), b) anchor charts (Nieto, 2000), c) graphic organizers (Hill, 2012), d) background knowledge (Brown,2008), e) questions (Hammond, 2015), f) descriptive feedback (Cole, 1995),

and g) mediating experiences (Gee, 2008, 2015). These 10 checklist items also correspond with the 10 culturally responsive reading comprehension focus lessons provided in the intervention.

Culturally Sustaining Reading and Writing Pedagogy Self-Efficacy Scale. The Culturally Sustaining Reading and Writing Pedagogy Self-Efficacy Scale has 15items that specifically address self-efficacy for culturally responsive literacy instruction. Caughlan and Cushman (2013) collaborated with Siwatu (2007) to adjust his Culturally Responsive Teaching Self-Efficacy Scale, which he created to assess PSTs' self-efficacy to use culturally responsive teaching techniques with students from diverse backgrounds. This scale was considered as a measurement. However, Siwatu's (2007) scale contains 40 questions, many of which did not correspond to the field experience context of this study's intervention. In this study, participants tutored one diverse student in reading comprehension, so Siwatu's (2007) survey items such as group work, building relationships with parents, and parent-teacher conferences did not pertain to PSTs' field placement experience. A factor analysis was performed to assess the reliability and validity of the items.

Procedure

This section discusses an overview of the intervention components, data collection, and data analysis for the evaluation of the CRCCII intervention As indicated at the conclusion of chapter three, the intervention was infused in an advanced level reading methods course and contains the following components: 10 focus lessons on teaching reading within a culturally responsive framework, 12 field placement experiences in a diverse setting, and nine learning activities paired with critical reflection (See Appendix D). The timeline for the focus lessons and learning activities can be found in Appendix E. The advanced level reading course met during the fall semester on Tuesday and Thursday mornings for a two-hour time block. On Tuesdays,

the course met in a college classroom. One half-hour of the instruction time was devoted to an intervention component. On Thursdays, the course met at a partnership school. One hour and fifteen minutes were spent tutoring a diverse student in reading comprehension, and a half-hour was spent on a learning activity in a meeting room at the partnership school.

Intervention Components

As previously indicated, the CRCCII intervention was facilitated within a required reading methods course. The intervention components were delivered within the course, including specific culturally responsive content lessons, field placement experiences, and learning activities.

Focus lessons. The 10 focus lessons presented during the reading methods course time focused on culturally responsive teaching practices, reading instruction situated within a culturally responsive framework, and reading instruction techniques that support reading comprehension of students from diverse backgrounds. Some of the lesson topics included: culturally responsive teaching components, selecting culturally responsive texts, and supportive read aloud protocols. For a full list of the ten lessons with detailed lesson components, see Appendix D.

Field experiences. The field experiences were held at a partner elementary school. Each PST was partnered with a second or third grader from a culturally diverse background. The students were selected by their classroom teacher based on identified challenges (through formative and summative classroom assessments) in reading comprehension needs such as monitoring for meaning and identifying character traits or plot factors. PST's tutored their student in reading comprehension through a culturally responsive teaching framework for one hour each week. PST applied their culturally responsive teaching and reading instruction

knowledge and skill through the creation and implementation of reading comprehension lessons situated in a culturally responsive teaching framework.

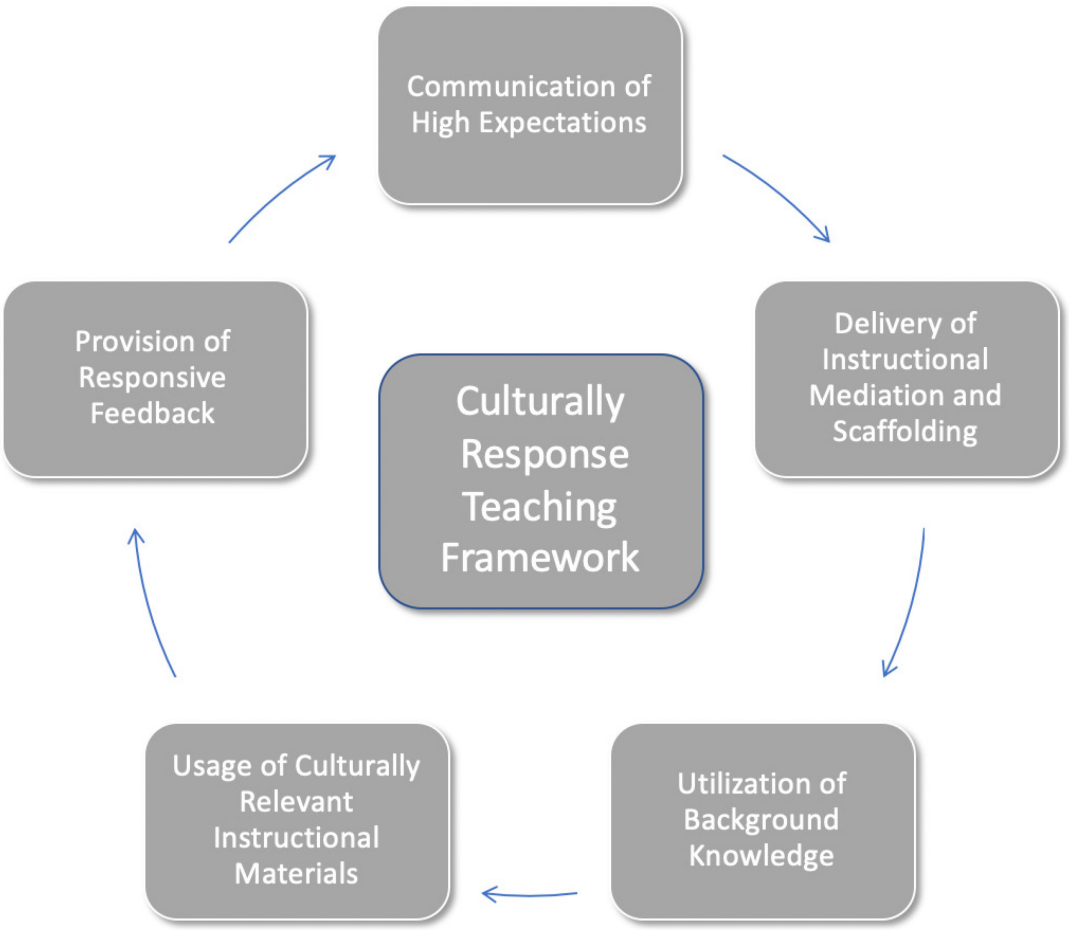

Figure 9. Culturally Responsive Teaching Framework.

Learning activities paired with critical reflections. For ten weeks, I led PSTs in a learning activity directly after their tutoring experience for a half hour. PSTs met in a large meeting room in the partnerships school. Each learning activity included a fifteen-minute learning experience and fifteen minutes of small group dialogue in response to a critical reflection prompt. For example, during one learning activity, PSTs examined a problem of practice of a student who did not have the background knowledge for learning key concepts in a

text. The PSTs participated in small group improvisation on how they would address this problem during a reading lesson. Then small groups of PSTs engaged in dialogue with the prompt to reflect on how the impromptu responses aligned with the course readings. For a full list of learning activities, see Appendix E.

Data Collection

Evaluation data were collected for (a) the short-term outcomes of growth in PSTs' knowledge, skill, and self-efficacy to teach reading comprehension to students from culturally diverse backgrounds, (b) intervention fidelity for dosage and participant responsiveness (See Figures 7 and 8). Data were collected in several formats: semi-structured interview, reflection journals, observation checklist, self-efficacy survey, and researcher journal. All participants were assigned a pseudonym and an identification number, both of which were stored on a password-protected computer.

Table 8

Data Collection and Timeline

Measure	Quantitative	Qualitative	Data Collection Type	Timeline
Culturally Sustaining Reading and Writing Pedagogy Self-Efficacy Scale (Caughlan & Cushman, 2013)	X		Paper-based	September 3, 2019 December 3, 2019
Semi-structured interview data transcripts		X	Transcripts	September 26, 2019 October 22, 2019 November 26, 2019
Equitable Tutoring Practices Observation Checklist	X		Paper-based	September 26, 2019 October 22, 2019 November 26, 2019
Response Journals		X	Web and paper-based journal entries	Once a week from September 5, 2019 to December 5, 2019

Researcher Journal		X	Web and paper-based journal entries	As needed from September 3, 2019 to December 5, 2019
Secondary Data	X		Paper-based	April 25, 2019

Culturally Sustaining Reading and Writing Pedagogy Self-Efficacy Scale. The Culturally Sustaining Reading and Writing Pedagogy Self-Efficacy Scale (Caughlan & Cushman, 2013) was administered prior to participation in the intervention and after the intervention was completed. The survey was given in person in a printed format. PST's were given 20 minutes to independently complete and turn in the Culturally Sustaining Reading and Writing Pedagogy Self-Efficacy Scale (Caughlan & Cushman, 2013) to the researcher.

Semi-structured interview data. During the three-month intervention, PSTs engaged in a semi-structured interview in September, October, and November for fifteen minutes. The ten PST's were divided into three small groups of three, three, and four. Each group interviewed for fifteen minutes. Interview questions were prepared in advance (See Appendix F), and PST's were asked additional questions to explain or elaborate on their answers. A computer was used to record the interviews, which were then transcribed for analysis.

Equitable Tutoring Practices Observation Checklist. Once a month, PST's were observed simultaneously by me and the RA during their field placement. For an hour and twenty minutes, the researchers circulated among the PST's as they tutored and used the Equitable Tutoring Practices Observation Checklist to score their instructional practices. Observation checklist data were compiled weekly. In order to provide scoring reliability, the researcher and research assistant (RA) practiced scoring PST's during their field experiences with the Equitable Tutoring Practices Checklist for an hour during the Spring 2019 semester to calibrate for

interrater reliability. Nine PST's were observed. After each observation, the researcher and RA compared the scores and discussed discrepancies to clarify understandings and expectations. After five observations, the researcher and research assistant scored PST's tutoring practices with consistency.

Reflection journal data. PST's crafted weekly reflections on their learning activities and their field placement experiences. Reflection responses were submitted electronically through the class management system.

Researcher journal data. Researcher observations that provided supportive data were documented by the researcher in a journal**.** These were notes taken after class, after the field experiences, and while reading PSTs response journals. These notes included quotations from those involved in the intervention, observations from occurrences in the intervention, and reflections.

Secondary data. Scores from the previously administered Culturally Sustaining Reading and Writing Pedagogy Self- Efficacy Scale and Equitable Tutoring Practices Observation Checklist were collected form the MUTE department chairman in alignment with IRB permission from the institution and JHU. In preparation of accreditation, the MUTE department chairman requested that PST's enrolled in reading instruction courses with field experiences during the Spring 2019 semester be assessed with the Culturally Sustaining Reading and Writing Pedagogy Self- Efficacy Scale and Equitable Tutoring Practices Observation Checklist. This data was used to inform a self-study to assess the MUTE program for CAEP diversity requirements.

Data Analysis

Data analysis of the CRRCII involved both quantitative and qualitative methods to examine the change in PSTs' knowledge, skill, and self-efficacy to teach reading comprehension

to students from diverse cultural backgrounds. Data analysis assessed these three factors and the intervention fidelity.

Quantitative data. Descriptive and inferential statistics were utilized to analyze the quantitative data in connection with the three outcome evaluation questions. Summary matrix tables (See Appendix G) present the alignment between research questions, data collection, and data analysis. Survey and checklist data were entered into SPSS and cleaned. Descriptive statistics were calculated for the Equitable Tutoring Practices Observation Checklist data. A McNemars' test was performed to investigate the differences between PSTs' skill to teaching reading comprehension to students from diverse cultural backgrounds. Paired and independent t-tests were performed on survey data to examine the differences in PSTs' skill to teaching reading comprehension to students from diverse cultural backgrounds

Qualitative data. Three types of qualitative data were analyzed, including semi-structured interview data, response journals, and the researcher journal. The analysis was conducted according to a Strauss and Corbin's (1997) seven-step analytic procedure to generate codes and themes: (a) organizing the data, (b) reading and re-reading the data, (c) coding the data, (d) generating themes, (e) interpreting the findings, (f) investigating alternate discernments for external reviewers, (g) sharing the findings. The coding process included deductive coding (Strauss & Corbin, 1997) with data coded based on topics from reading instruction and self-efficacy literature (Bui & Fagan, 2013; Caughlan & Cushman; 2013; Gay, 2010; Hill, 2012; Lazar, 2007; May et al., 2014; Sharma & Christ, 2017; Siwatu, 2007; Siwatu & Starker, 2010) which was utilized to generate emergent codes beyond the a priori themes of: (a) culturally relevant texts, (b) read aloud protocols (c) cognitive strategies, (d) metacognition, (e) growth mindset, (f) assessment, (g) targeted instruction, (h) reading instruction self-efficacy, and (i)

culturally responsive teaching self-efficacy. To help minimize researcher bias, after completing the codes and themes, a colleague of the researcher who is familiar with PST and self-efficacy literature, externally reviewed the themes and codes. The external reviewer concurred with the codes and themes identified by the researcher.

Conclusion

This chapter presented a convergent parallel, mixed methods research design for data collection and analysis. Six research questions informed the selection of the convergent parallel, mixed methods research design to support the data collection, data analysis, and data interpretation for the CRRCII. The chapter also provided an overview of CRRCII outcome and process evaluation included information on the study purpose, participants, instruments, and procedures of the research design.

Chapter 5

Findings and Discussion

Multicultural education is an essential component of teacher education programs (Banks, 2016). However, multicultural education instruction is more likely to be effective if it is infused in and across a teacher education program. (Sleeter & Owuor, 2011). Sociocultural theory (Gee, 2008; Vygotsky, 1978) and self-efficacy theory (Bandura,1986) provide a framework for understanding the process of change in elementary PSTs' knowledge, skill, and self-efficacy to teach reading comprehension to students from diverse backgrounds that occurred through participation in the Culturally Responsive Reading Comprehension Instruction Intervention (CRRCII). The 21 and a half hours of professional learning associated with the CRRCII occurred over a four-month period. The CRRCII was embedded in a semester-long advanced level reading methods course and was implemented as intended in the fall 2019 semester. Providing PSTs with learning research-based instruction, corresponding field experiences, and learning activities paired with critical reflection facilitated growth in their content knowledge, skill, and self-efficacy to teach reading comprehension to students from diverse cultural backgrounds.

This section includes the results of the data analysis of the Culturally Responsive Reading Comprehension Instruction Intervention (CRRCII). The purpose of this analysis was to examine PSTs' (a) knowledge of culturally responsive reading comprehension instruction (b) skill in implementing culturally responsive reading comprehension instruction during a field practicum with a student from a diverse cultural background, and (c) self-efficacy to implement culturally responsive reading comprehension instruction during a field practicum with a student from a diverse cultural background. In Chapter 4, I presented the research study design and the CRCCII components. The goal of this chapter is to present the findings for each research

question and the significance of the findings to inform future research in the field of preparing elementary PSTs to effectively teach diverse learners.

Output Questions

Research Question 1: How does PSTs' knowledge to teach reading comprehension to elementary students from diverse cultural backgrounds change through participation in the CRRCII?

Research Question 2: How does PSTs' skill to teach reading comprehension to elementary students from diverse cultural backgrounds change through participation in the CRRCII?

Research Question 3: How does PSTs' sense of self-efficacy to teach reading comprehension to elementary students from diverse cultural backgrounds change through participation in the CRRII?

Process Questions

Research Question 4: Are preservice teachers receiving an adequate amount of learning experiences to support growth in their skill and self-efficacy to teach reading comprehension to elementary students from diverse cultural backgrounds?

Research Question 5: Are the preservice teachers satisfied with the instructional components they experienced in the CRRCII?

Secondary Data

In preparation for program accreditation, the Mason University Teacher Education (MUTE) Department Chairperson requested that the instructor for the advanced level reading course collect data for a self-study concerning diversity as a cross-cutting theme of the MUTE program. During the last week of the course in the spring 2019 semester, nine PSTs were

observed during their field experience tutoring one student in reading comprehension using the 10-item Equitable Tutoring Practices Observation Checklist (See Appendix B). In addition, during the same week, the nine students completed the Culturally Sustaining Reading and Writing Pedagogy Self-Efficacy Scale (Caughlan & Cushman, 2013). Data collected on these nine PSTs through the use of both instruments serve as control group data.

Research Question One

Knowledge to Teach Reading Comprehension to Diverse Learners

In this section, I investigated the first research question, which focused on how PSTs' knowledge to teach reading comprehension to elementary students from diverse cultural backgrounds changed through participation in the CRRCII. To provide a frame of reference for PSTs' content knowledge of how to support students from diverse backgrounds with supportive materials as well as instructional methods and strategies, it is helpful to note that a surprise finding from the researcher's journal highlighted that each of the ten participating PSTs self-reported that they had no formal instruction on or professional experiences with teaching reading comprehension using a culturally responsive reading framework. In addition, all ten PSTs had no formal instruction on, or professional experience with, teaching culturally relevant texts or read aloud protocols and cognitive strategies that support the reading comprehension of elementary students from culturally diverse backgrounds.

Themes and Coding Categories

Two main themes and four coding categories emerged from the qualitative analysis of PST's journal reflections and focus group interview data to provide insight into PST's knowledge about teaching reading comprehension to students from diverse cultural backgrounds. Twelve a priori codes were used to analyze PSTs' journal reflections and interview data. The

four codes of concepts, theories, application, and reflection were blended with the topics of culturally relevant texts, read aloud protocols, and cognitive strategy instruction to produce the 12 codes. For example, one code was culturally relevant texts concepts and another code was culturally relevant text theories. I used a different colored marker to code the data for each of the 12 a priori codes. I then created a nesting code chart with participants names and the three categories of data for culturally relevant texts, read aloud protocols, and cognitive strategy instruction. Under each category, the chart had four slots to record evidence of concepts, theories, application, and reflection. Analysis of the chart generated the two themes of *Foundational Content Knowledge* and *Emerging Content Knowledge. Foundational Content Knowledge* theme reflected four evidences for each category, whereas *Emerging Content Knowledge* reflected three or fewer evidences for a category. Table 9 presents the *Foundational Content Knowledge* emergent themes and codes.

Table 9

Response Codes Grouped by Theme and Category

Theme and Code	Journal Reflections and Interview Data for Round One	Journal Reflections and Interview Data for Round Two	Journal Reflections and Interview Data for Round Three
Foundational Content Knowledge	Foundational response that is accurate and reflects a synthesis of using culturally relevant texts	Foundational response that is accurate and reflects a synthesis of read aloud protocols	Foundational response that is accurate and reflects a synthesis of cognitive strategy instruction
Concepts	Labels and defines culturally relevant texts	Labels and defines read aloud protocols	Labels and defines cognitive strategy instruction
Theories	Describes the effect of a culturally relevant text on student interest and motivation	Describes the effect of read aloud protocols on student engagement	Describes the effect of cognitive strategy instruction on student efficacy to comprehend a text

Application	Provides an example of how a culturally relevant text supported a student's reading comprehension	Provides an example of how a read aloud protocol supported a student's reading comprehension	Provides an example of how a cognitive strategy instruction supported a student's reading comprehension
Reflection	Explains how a culturally relevant text helps students monitor their comprehension and interpret what they read	Explains show read aloud protocols enhance student's construction of meaning.	Explains show clear and precise cognitive strategy instruction equips students to think deeply about texts.

Participants who demonstrated *Foundational Content Knowledge* were able to incorporate concepts, theories, applications, and reflection related to content knowledge of teaching reading comprehension about teaching reading comprehension in a culturally responsive teaching framework. One hundred percent of the participants were able to address the four coding areas of concepts, theories, application, and reflection related to the use of culturally relevant texts and cognitive strategy instruction. Ninety percent (n=9) of participants were able to address the four coding areas of concepts, theories, application, and reflection related to the use of supportive read aloud protocols for diverse learners. Comparatively, 10 percent (n=1) of the participants demonstrated *Emerging Content Knowledge* in which the participant's responses for supportive read aloud protocols reflected three out of the four coding categories. The following sections highlight various participants' responses to survey questions and reflective journal prompts as examples of the concepts, themes, application, and reflection coding categories.

Concepts. The coding category of concepts aligns with research question one (RQ 1) and comprised responses related to labeling and defining: culturally relevant texts, read aloud protocols that support the reading comprehension of diverse learners, and cognitive strategy instruction with a focus on metacognition. The following example reveals PSTs knowledge of

concepts as well as the realization of how using culturally relevant texts, read aloud protocols, and cognitive strategies support the learner with whom they worked. Concerning identifying defining culturally relevant texts, Participant 9 wrote in her response journal how she intentionally made text selections so the learning experiences would connect well with her student.

> I focused heavily on finding texts that Lucas would relate to, understand well, or be interested in. I also looked for texts about characters who were like him in gender, personality, and ethnicity. Finding texts with a mix of Spanish and English words was a fun experience because texts like these nurtured his Hispanic heritage . . . and created learning experiences that seemed closer and more personal to him.

During a focus group interview, Participant 10 described how she views read aloud protocol use as highly supportive of her ELL student.

> A read aloud protocol is so supportive for my student because he's an ELL student . . . it's just so important that we stop and refer to our anchor chart or even to go over what a word means. Because we have been doing the read aloud protocol where we read a little and then discuss the text, I think he sees that he can stop and discuss his thoughts.

During a focus group interview, Participant 4 shared how teaching a cognitive strategy supported her student's metacognition.

> For example, I taught specifically about how to connect the text to background knowledge. I made sure that my student either wrote down or spoke out her connections. I did not want to assume what she was thinking. The anchor chart that I used to teach the strategy had the thinking steps on it that I modeled, and she could refer back to. Today's

> lesson built on earlier lessons that I taught about metacognition. As the lessons progress, I can see that thinking about her thinking comes more easily to Lydia.

As evidenced above, participants demonstrated the ability to label and define terms related to teaching reading comprehension to students from diverse backgrounds, the dependent variable of interest in research question one (RQ 1).

Theories. In this category, participants' comments gave evidence that they could identify the connection between the use of culturally relevant texts, read aloud protocols, and cognitive strategy instruction with a focus on metacognition and students' interest, motivation, engagement, and self-efficacy for reading comprehension. For example, during a focus group interview, Participant 6 responded to a question about using culturally responsive texts with the following:

> I chose a book called *Too Many Tamales* and it really just opened a whole new door. She [the tutee] told me about her grandma who made tamales and she was way more engaged [in the lesson] than she was before. . . I could tell that she enjoyed what she was doing and she was way more open to learning.

During a focus group interview, Participant 10 responded to a clarification question *What would you say about the effectiveness of using a read aloud protocol with your student?* With the following statements.

> I'd say it's extremely effective, and it's the thing that really driving him [the tutee] to focus and to get those key points. I think without it we'd still be kind of floundering . . .he has trouble really pulling out the key points if he is just listening to a read aloud.

Relative to how cognitive strategy instruction supports a student's reading comprehension self-efficacy, Participant 4 shared the following during a focus group interview.

> The biggest thing is that you teach them how to think, not what to do. . . once they learn a certain cognitive strategy . . . they become stronger and stronger thinkers. The more they use the strategy, the more automatic the thinking process becomes.

Participants' responses showcased knowledge about how culturally relevant texts encourage student motivation (Christ & Sharma, 2017), read aloud protocols support student engagement (May et al., 2014), and cognitive strategy instruction promotes students' reading comprehension self-efficacy (Bui & Fagan, 2013).

Application and reflection. These coding categories included participants' responses that depicted a personal example and description of how culturally relevant texts, read aloud protocols, and cognitive strategy instruction support students' ability to better comprehend texts. In an example that explored culturally relevant texts, Participant 5 wrote the following in their response journal.

> Most of the books I choose were about a Korean character and his or her experience. I worked hard to find books that somehow related to the experience of my student. I found these texts to be the most helpful in my lessons. My student was more engaged and excited about reading the book because he could relate to the characters. It helped him with comprehension because he had the background knowledge about the culture of the characters.

During a focus group interview, Participant 8 explained how a read aloud protocols provided specific support to help her student slow down and focus on the details of the story.

> Today during the lesson, we stopped during the read aloud to discuss the setting and really looked at the details in the illustrations about the setting. At the end of the story, she was able to do some really deep thinking about how the setting influenced the

character's decisions in the story. She used some of the different details that we had talked about during the story, which was awesome.

Regarding cognitive strategy instruction, Participant 4 shared during a focus group interview how cognitive strategy instruction challenged her student to think about the text in more complex ways.

> In my lesson today, we went over the differences between quick questions and deep-thinking questions. Basically, I used an anchor chart and went through the thinking steps of identifying the two types of questions and the thinking steps for how to answer each question. I used a think aloud to explain the chart. Then I asked her questions about our text, and she would have to identify if it was quick or deep and explain the thinking steps and then answer it. She learned it so fast and was so engaged that I asked her if she would like to generate questions and quiz me if they were quick or deep thinking questions. She asked me a question, and then she expected me to identify it and go through the thinking steps to answer it. It was cool to see her really get the strategy, and we both comprehended the story better using thinking steps to answer the questions.

In addition to the evidence that most PSTs demonstrated *fundamental knowledge* on the concepts, theories, application, and reflection of culturally relevant texts, read aloud protocols and cognitive strategy instruction, evidence from the research journal provides support for the overall growth in PSTs knowledge to teach reading comprehension to diverse learners. The PSTs themselves realized the growth in their knowledge about teaching reading comprehension to students from diverse cultural backgrounds. For example, during the tenth week of the intervention, Participant 4 shared the following with me after her field experience.

> I was really nervous about this field experience at first. I felt like I just did not know enough about how to teach reading, and I was afraid that I would let my student down. I talked with Lori [another PST in the intervention], and we shared how surprised we are at how much we have learned. Everything in this course has been so helpful. I am even using the strategies that I learned in this course in my other practicum. I teach fifth-grade social studies, and I am using the strategies in my social studies lessons, and they are really helping.

Similarly, near the end of the intervention, Participant 10 shared with me after class how she was so enthusiastic about what she was learning in this course. Participant 10 went on to say how she regaled her husband with details about the course concepts and theories and how they played out when she applied them in her tutoring sessions. Here is what she said.

> I am a science major, and I waited to take my reading courses last. I did not think that this course would be that helpful for me. But I have to tell you that what I learned in this course is what I have been waiting for. I now know so much about how to adjust my teaching to support students from diverse cultures. I also know how to teach reading strategies. I now realize how helpful this will be for using science texts in my classroom. On the days that I have this class, I tell my husband about all of the new things that I have learned. You think he would get sick of it, but he gets really excited about these teachings strategies too because he teaches high school science.

External evidence of PSTs; growth in their knowledge to teach reading comprehension to students from diverse cultural backgrounds came from my research assistant (RA), who was also the classroom teacher of the students who were tutored in the field placement. During the second

round of gathering data with the observation checklist, my RA shared the following poignant comment after reading through Participant 3's lesson plan.

> When I read your students' lesson plans and watched them tutor, I cannot believe how much they know about how to create learning experiences that are targeted for the learner they work with. They all have improved so much since last month. When I read these lesson plans, I find that I want to know more about how to use read alouds this way and how to help students think through the reading strategies. I would love to take this class with you and learn what these novice teachers have learned.

After the third round of gathering data using the observation checklist, my RA shared the following:

> Your students have learned a lot of things. They do not just think broadly about teaching reading; they consider the culture of their student. They use texts with the student's culture, and they make very good use of them. I have seen the lesson plans improve each of the three times. This third time, I can see the learning coming altogether. I still see the first things in the lesson plans and now the plans are really complete and unique for the student they are working with.

The evidence of PSTs *fundamental knowledge* percentages along with PSTs and my RA's reflections concerning PSTs knowledge support that PST's knowledge to teach reading comprehension to diverse learners has grown through participation in the CRRCII. In some cases, the PSTs' content knowledge was even transferred and utilized in other contexts. In my researcher journal, I recorded a conversation between two PSTs who described that they were using cognitive strategy instruction in other field placements. Participant 9 has a field placement teaching ten hours a week in fifth grade, and Participant 4 has field placement teaching ten hours

a week in a seventh-grade social studies class. Both participants noticed that their students struggled reading their content area texts, so they included cognitive strategy instruction in their content area instruction.

Research Question Two

Skill to Teach Reading Comprehension to Diverse Learners

This section explores the second research question, which focused on how PST's skill to teach reading comprehension to elementary students from diverse cultural backgrounds changed through participation in the CRRCII. The quantitative data were collected from observations of PSTs as they taught reading comprehension lessons to one student from a diverse cultural background during a field experience. The PSTs' 75-minute reading lesson typically consisted of 15 minutes of formative assessment or review of strategies previously taught, 30 minutes of instruction using a read aloud protocol, and 30 minutes of cognitive strategy instruction with a text that the student read and responded to.

To investigate how PSTs' skill to teach reading comprehension to elementary students from diverse cultural backgrounds changed through participation in the CRRCII, I analyzed the quantitative data collected from three rounds of observations conducted while PSTs taught reading comprehension lessons. My RA and I used the 10-item Equitable Tutoring Practices Observation Checklist (See Appendix B). Descriptive tests were run to identify the frequency that the PST demonstrated each of the 10 skills during each of the three observation times (See Table 15). As Table 15 highlights, PSTs grew consistently in their instructional skill throughout the semester. At the end of the intervention, PSTs demonstrated 100% of the ten instructional skills except for two participants who did not give evidence of asking higher-order questions during their lesson.

The steady growth in PSTs' skill to teach reading comprehension to student from a diverse cultural background (See Table 10) aligns with the timetable of when focus lessons on corresponding skills were taught (See Table 11). Checklist components 1-3 were taught in the first month of the intervention. Checklist items 5, 6, and 8 were taught the in second month of the intervention. Furthermore, checklist items 4, 7, 9, and 10 were taught in the last month of the intervention. Except for one PST's demonstration of using inadequate wait time, all ten PST's made progress in developing new instructional skills while continuing to demonstrate competence in skills they had already learned.

A closer look at Table 10 reveals that during each observation PSTs made strong progress in developing their instructional skills. During the September observation, all 10 PSTs were able to implement skill number one, using a variety visual aids, and participants three and nine were able to implement skill number two, instructional materials that reflect the racial, ethnic, and cultural background of the student. This is a strong representation of skills that were learned in focus lessons during September. During the October observation, all 10 of the PSTs demonstrated competence of the first three skills, including use of visual aids, culturally relevant materials, and graphic organizers as well as skills five and six including use of examples from the student's background experience and use of probing questions. In addition, nine PSTs implemented skill eight. Again, the PSTs demonstrated a strong showing of skills that were taught during September and October focus lessons. During the last observation all 10 PSTs demonstrated evidence of implementing all 10 skills except skill number seven, higher order questions, in which only Eight out of 10 PSTs provided evidence. However, the participants demonstrated 80 percent growth over the semester for skill number seven revealing solid overall skill growth.

Table 10

Percentage of PSTs (n = 10) in Treatment Group Who Provided Evidence of Checklist Items

Observation Checklist Item	Observed on 9/26/2019	Observed on 10/22/2019	Observed on 11/26/2019	Month the Checklist Item was Taught
1. The preservice teacher uses a variety of visual aids, gestures, or props to support the student's learning.	100%	100%	100%	September
2. The preservice teacher ensures instructional materials and visuals reflect the racial, ethnic, and cultural background of the student.	90%	100%	100%	September
3. The preservice teacher models the use of graphic organizers.	100%	100%	100%	September
4. The preservice teacher identifies the student's current knowledge before instruction.	70%	70%	100%	November
5. The preservice teacher uses the student's real-life experiences to connect school learning to the student's life (Funds of Knowledge).	80%	100%	100%	October
6. The preservice teacher uses probing questions and clarifying techniques to assist the student's responses.	70%	100%	100%	October
7. The preservice teacher asks the student higher-order questions.	10%	0%	80%	November
8. The preservice teacher uses adequate wait time.	100%	90%	100%	October
9. The preservice teacher gives the student effective, oral feedback that prompts improved performance	50%	90%	100%	November
10. The preservice teacher asks the student for feedback on the effectiveness of instruction	0%	0%	100%	November

Table 11

Percentage of PSTs (n =9) in Control Group Who Provided Evidence of Checklist Items

Observation Checklist Item	Observed at the end of the semester in Spring 2019
1. The preservice teacher uses a variety of visual aids, gestures, or props to support the student's learning.	33%
2. The preservice teacher ensures instructional materials and visuals reflect the racial, ethnic, and cultural background of the student.	11%
3. The preservice teacher models the use of graphic organizers.	11%
4. The preservice teacher identifies the student's current knowledge before instruction.	22%
5. The preservice teacher uses the student's real-life experiences to connect school learning to the student's life (Funds of Knowledge).	44%
6. The preservice teacher uses probing questions and clarifying techniques to assist the student's responses.	22%
7. The preservice teacher asks the student higher-order questions.	11%

8. The preservice teacher uses adequate wait time.	44%
9. The preservice teacher gives the student effective, oral feedback that prompts improved performance	22%
10. The preservice teacher asks the student for feedback on the effectiveness of instruction	0%

Note. These observation scores were from the control group who experienced no treatment.

Preservice Teachers' Reading Instruction Implementation

In addition, inferential statistics were run on the observation checklist data using McNemar's Test. When comparing observation data collected during the first observation round with observation data collected on the third observation round, statistical differences were found on items seven [$p = .00$] concerning asking higher order questions and ten [$p = .04$] concerning asking students for instructional feedback. These differences are most likely due to the fact that by the first observation, several focus lessons had been taught, and PSTs were already displaying a number of the observation checklist skills. The skills associated with items seven and ten were taught much later in the intervention.

However, when comparing data from the control group's observation checklist scores with the last round of observation score for PSTs who participated in the intervention, there were statistically significant differences for all of the checklist items one [$p = .03$], two [$p = .02$] , three [$p = .02$], four [$p = .02$], six [$p = .02$], seven, [$p = .03$], nine [$p = .02$], and ten [$p = .00$]. The lack of significant differences between items five and eight may be due to the fact that the skills for items five and eight align with general reading comprehension instruction that is typically taught in this advanced level reading course.

The findings from the descriptive and inferential statistics highlight PSTs' growth in their skill to teach reading comprehension to students from diverse cultural backgrounds. Analysis of qualitative data collected from the focus group interview, response journals, and the researcher journal correspond with these findings. The coding process included deductive coding (Strauss &

Corbin, 1997) with data coded based on topics from reading instruction and self-efficacy literature which were utilized to generate the a priori codes of (a) culturally relevant texts, (b) read aloud protocols (c) cognitive strategies, (d) metacognition, (e) growth mindset, (f) assessment, (g) targeted instruction, (h) reading instruction self-efficacy, and (i) culturally responsive teaching self-efficacy. After the coding process, themes were identified.

Skill to use supportive instructional materials. During the focus group interviews, PSTs gave several examples that highlight their skill in using supportive instructional materials. Participant 10's explanation of using culturally relevant texts reveal her newly found skill supported her student's comprehension.

> Using books that David could relate to with culture, familiar pictures, and words captured his attention and his heart. He was so willing to put in the work when he saw that I was putting in the effort to find books he was interested in. The fact that the books had parts of his cultural and familiar family dynamics allowed him to concentrate on things like theme, character development, and connecting the story to his life and other books.

Participant 2's explanation during the focus group interview showcases how she values the skill she has developed to enhance her students' thinking process while using the components of a read aloud protocol.

> Well, what I've gotten in other education classes and the trends we're seeing is we want students to be thinking more critically, and we want them to do more than just repeat information back to us. But really until this class, we haven't really been taught how to do that. And so, I think with learning about this different type of read aloud protocol and learning how we can instruct students, we need to stop. This is the process to building our thinking skills. We're not giving them the answers to the questions about the text, but

> we're reminding them about how to do the thinking process. I think it is making them able to do what we're asking with a deeper level of thinking by showing them how to do that. And I am not seeing that in other places, like in other classes and things. So, I think in this class with us learning about it in our lectures and then being able to practice it with our student, just seeing how effective it is . . . It has been huge.

During the first round of observations, my RA paused by Participant 5 and quietly whispered to me the following.

> This is so amazing to see. That student is my most fragile learner because he is still learning English, and he is adjusting to the school culture. That tutor picked just the right text to support [Ho-sung's] learning and help him connect to the story. He is so engaged with the learning experience and excited about the Korean words in the text. She just entered into his world, and he let her in.

These examples support the conclusion that PSTs grew in their instructional skill to select and use culturally relevant texts to help students connect with the messages in the text. In addition, these examples align with the study finding of significant difference [$p = .02$] between PSTs' scores on number two of the Equitable Tutoring Practices Observation Checklist between the PSTs who participated in the intervention and the PSTs in the control group. This checklist item concerns the selection of instructional materials that reflect the racial, ethnic, and cultural background of the student. Similar to Christ and Sharma's (2018) findings, the PSTs who participated in the CRRCII grew in their knowledge and skill to select culturally relevant texts that would support the reading comprehension of a student from a diverse cultural background. However, in contrast to Christ and Sharma's findings, the PSTs who participated in the CRRCII did not struggle with selecting a culturally relevant text that aligned with the cultural identity of

the student they worked with or struggle to engage the student in conversation about the text. Instead, the PSTs who participated in the CRRCII struggled to find enough high quality culturally relevant texts that matched their student's cultural identities and interests. In particular, it was challenging for two PSTs to find books for their male African American tutees and for two PSTs to find books for their male Korean tutees. The four PSTs shared their challenge early on in the intervention. Out of this conversation, the PST cohort offered to collaborate. As each of them searched for texts for their student, they also searched for texts for each other. For the rest of the semester, PSTs could be observed sharing texts, passing along possible text titles, and discussing the resources they used to find culturally relevant texts.

Skill to implement read aloud protocols. In response to a focus group interview inquiry to see if using a read aloud protocol helps her student, Participant 10 reveals her skill growth in using read aloud protocols by saying

> It definitely helps. It is not something that I knew how to do before, but it has been huge with helping me help him. It helped to guide him because he has so many questions and thoughts. It one, helps us keep on track with what we are doing, and two helped me with the structure of the lesson. We'll read a couple of pages, stop . . . write down our thinking on post-it notes . . . having him stop and think helped him process more . . . he was able to make better connections this way. . . It really gave me direction and helped my student focus on the thinking.

During the second round of observations, the RA shared with me how impressed she was with the PSTs' implementation of read aloud protocols.

> I loved watching the preservice teachers while they read the texts aloud. Instead of reading the entire text, they read the text in chunks and really engaged the students in

> purposeful dialog throughout the reading experience. In this way, they used the text in a fuller manner and provided mediating experiences to help the student comprehend at deeper levels.

These examples support the conclusion that PSTs grew in their instructional skill to implement read aloud protocols to help students engage in the learning task and to develop higher levels of thinking about texts. These qualitative examples concerning PSTs' development of skill to conduct an effective read aloud protocol also coincide with the significant differences found between the scores of PSTs involved in the intervention and PSTs in the control group for items four [$p = .02$] and six [$p = .02$] on the Equitable Tutoring Practices Observation Checklist. Item four concerns PSTs' skill in assessing the student's current knowledge before instruction, and six concerns PSTs' skill in asking probing questions. PSTs utilized both of these skills while conducting the read aloud protocols.

The use of these two skills while implementing read aloud protocol helped the PSTs support their student's reading comprehension before, during, and after reading a text which aligns with findings from Mitchell et al.'s (2012) study. The RA shared an observation that underscores how the PSTs' usage of read aloud protocols facilitated students' comprehension throughout the text.

> These PSTs use the book to the fullest in the read aloud protocols . . . Their lessons are so successful because they put the time into plans with a specific focus that they support before, during, and after reading. Because they are so well prepared, they have supportive questions ready, and they help students build on their current understandings.

Similar to Pendergast et al.'s (2015) findings, the intentional modeling of read aloud protocols and the opportunity for PSTs to apply their learning with a student from a diverse

cultural background provided in the CRRCII helped PSTs grow in their knowledge and skill to implement read aloud protocols. During a focus group interview, Participant 8 underscores how the CRRCII instructional components supported her read aloud protocol skill growth in her response to an inquiry on what helped her develop her read aloud protocols.

> I would say that I love when professors teach the way they want us to teach . . . so when you would walk us through how to create the lesson, I really appreciated how you modeled it for us. It made it more effective. Then you had us do it with a student. Doing it this way make the learning more enjoyable and effective.

Growth in the PSTs' skill to implement read aloud protocols also aligned with Mitchell et al.'s (2012) findings that detailed instruction and modeling combined with field experience supported PSTs' development their ability to support students with comprehension language demands before, during, and after reading the text in order to facilitate student comprehension.

Skill to implement cognitive strategy instruction. Analysis of interview data also revealed PSTs' growth in their skill to implement cognitive strategy instruction. In response to how her lesson went today during focus interview, Participant 9 confidently explained the strategy of today's lesson and how learning the strategy helped the student

> Today, I used a graphic organizer to help my student compare and contrast Mexican culture with American culture. I reviewed the thinking steps to identify key details to help him find them about each culture from the text. It really helped him to add the details to the graphic and lay out the comparison . . . otherwise, he reads to quickly and does not really stop and think about it. Helping my student with the thinking steps with the think aloud and the anchor chart really helps him with metacognition. I feel like helping him think is going to take him a lot further than having him just follow what I am

> doing with a particular book. I am giving him skills that he can take and use on a different book.

Similarly, during a focus group interview, Participant 5 shared about the interplay of pairing a culturally relevant book with a cognitive strategy.

> Today my lesson was on setting. What was really interesting was the book that I found. It was perfect. It was about a boy who moved from Korea. The strategy that I taught was how to infer how the setting influences the character's feelings . . . I related the strategy to one we worked on before on how to infer how a character was feeling. My student really opened up today and talked about how he felt when he moved from Korea. He made so many connections to his own life that he was able to do deeper thinking about the strategy.

A month into the intervention, the second-grade teacher at the partnership school approached me and commented on the PSTs he observed teaching their student in the hallway.

> I noticed your students teaching in the hallway. They are very skilled. I would love to have my students work with preservice teachers who know how to teach reading comprehension. Let me know if you need any students to work with.

These examples support the conclusion that PSTs grew in their instructional skill to teach cognitive strategies that help students comprehend and respond to texts. Further, these qualitative examples concerning PSTs development of skill in teaching cognitive strategies also coincide with the significant differences found between the scores of PSTs involved in the intervention and PSTs in the control group for items one [$p = .03$], three [$p = .02$], six [$p = .02$], seven [$p = .03$], nine [$p = .02$], and ten [$p = .00$] on the Equitable Tutoring Practices Observation Checklist. Item one concerns PSTs' skill in supporting student learning with visual aids, item three

concerns PSTs' skill in modeling the use of graphic organizers, and item six concerns PSTs' skill in asking probing questions. Item seven concerns PSTs' skill in asking higher order questions, item 9 concerns PSTs' skill to give effective feedback, and item ten concerns PSTs' skill in eliciting the student's feedback on the effectiveness of the instruction. PSTs utilized this set of instructional skills as they taught cognitive strategies.

The PSTs' growth in their skill level to teach reading comprehension to students from diverse backgrounds as a result of participating in the CRRCII aligns with findings from Bennett (2012) and Lazar (2007). Both of these studies found that supportive course components such as research-based instruction, field placements in a diverse setting, and reflection activities provided in a reading instruction method course can help PSTs develop culturally responsive reading instruction knowledge and skill (Bennett, 2012; Lazar, 2007).

Research Question Three

Self-Efficacy to Teach Reading Comprehension

In this section, I explored the third research question, which focused on how PST's self-efficacy to teach reading comprehension to elementary students from diverse cultural backgrounds changed through participation in the CRRCII. Quantitative data was collected using Caughlan & Cushman's (2013) Culturally Sustaining Reading and Writing Pedagogy Self-Efficacy (CSRWPSE) Scale (See Appendix C). The CSRWPSE Scale reflects perceptions of self-efficacy to teach literacy to students from diverse cultural backgrounds with a scoring range of 1 or 2 reflecting low agreement with CSRWPSE statements to 9 or 10 reflecting a great deal of agreement with CSRWPSE statements.

Factor analysis. A factor analysis of the CSRWPSE (Caughlan & Cushman, 2013) was conducted. Due to the domain-specific nature of the study, a confirmatory factor analysis of all

15 items from the post-test using MPlus was conducted. It terminated normally. All of the constructs loaded positively. The questions of the scale were categorized under the following four constructs: growth mindset, formative assessment, targeted instruction, and culturally responsive teaching tenets. Each of these constructs is supported by literature as key components for effective reading comprehension instruction.

Determining significance. To determine whether a significant change in PSTs' perceptions of self-efficacy had changed as a result of participating in the CRRCII, a paired-samples t-test comparing pre- and post-intervention scores as well as an independent samples t-test comparing post-intervention and control group scores were conducted. Comparing pre-test to post-test intervention groups, the post-test group was found to be significantly different. After the intervention, there was a significant improvement in scores for each of the four self-efficacy factors including: growth mindset [p = .00], formative assessment [p =.00], targeted instruction [p =.00], and culturally responsive teaching tenets [p =.00] (See Table 12). Additionally, examining the difference between teaching efficacy perceptions from the control group to post-test intervention group revealed significant differences for each of the four self-efficacy factors including: growth mindset [p = .00], formative assessment [p =.00], targeted instruction [p =.00], and culturally responsive teaching tenets [p =.00]. (See Table 13).

Table 12

Paired Two Sample t-Test for Pre-and Post-Intervention Means

Factor	t	*df*	*p*
Growth Mindset	8.63	19	.00
Formative Assessment	9.17	19	.00
Targeted Instruction	11.22	19	.00

Culturally Responsive Teaching Tenets	11.22	19	.00

Table 13

Independent Samples t-Test for Pre-and Post-Intervention Means

Factor	t	*df*	*p*
Growth Mindset	7.44	17	.00
Formative Assessment	11.24	15.54	.00
Targeted Instruction	13.26	16.68	.00
Culturally Responsive Teaching Tenets	14.36	16.84	.00

Growth mindset. Item one of the Culturally Sustaining Reading and Writing Pedagogy Self-Efficacy Scale (Caughlan & Cushman, 2013) focuses on self-efficacy to help students develop a growth mindset towards learning to read. A growth mindset, defined as the belief that an individual has some control over their intelligence (Dweck, 2006), can encourage students to value learning opportunities and work through learning challenges (Blackwell, Trzesniewski, & Dweck, 2007). Preservice teachers need to recognize that diverse students have the potential to learn to read (Lazar, 2007), and they need to have the self-efficacy to communicate this to students (Romero, Master, Paunesku, Dweck, & Gross, 2014). Comparing the pre-test to post-test intervention groups, a significant difference was noted in PSTs' perceptions about their ability to help students believe they will be able to grow in their reading skills [t = 8.63, df =19, p = .00]. Similarly, comparing control and post-intervention groups a significant difference was noted in PSTs' response scores [t = 7.44, df = 17 p = .00].

Qualitative data from focus group interviews, response journals, and the researcher's journal coincide with the quantitative findings that PSTs grew in their self-efficacy to help students develop a growth mindset towards reading comprehension. Over the semester, I noticed that as the PSTs because more knowledgeable about and skilled in teaching reading comprehension to students from diverse cultural backgrounds, they also became more efficacious to encourage students with a growth mindset towards reading comprehension and to motivate students to put the effort into growing their comprehension skills. During a focus group interview, Participant 2 showcased her increased confidence to motivate her student towards reading comprehension growth. Her answer highlights developing knowledge and skill to provide a learning context that values what the student brings to the learning experience and encourages a student to invest in the learning experience. Participant 2 began her answer by explaining how helpful an initial assignment of interviewing her student to identify their cultural strengths and interest was to help her develop target instruction for her student.

> Interviewing them, I didn't realize how important that was. Because you think reading is just the step by step, everyone can do it if you get enough practice in. And it is partly that. But, getting to know your student and finding out what they love, and that . . . just opens doors for them . . . gets them more motivated and more willing to work for you. If you create that relationship with them and they know that you care about them, and you're willing to put the time in and get them books that they love, and then I think they're more willing to work for you and work on their reading and skills.

Midway through the semester, Participant 4 shared a poignant admission with me after a tutoring session.

> Now that I have worked with [Linda] for a few weeks, I put secret goals into each of the lessons. I want her to become good at the comprehension skills, but I also want her to realize that she is capable and that she has the ability to become a really good reader. So, I make goals for myself that I will give her descriptive feedback on what she does well and to make sure that we celebrate when we reach our learning goals.

Additional confirmatory evidence for PSTs' growth in self-efficacy to encourage a growth mindset came from the RA during the third round of observations. As we observed participant 3, the RA shared that

> Watching her work with [Cain] this semester has been amazing. She gets better and better with him. He has some emotional needs and he can get passed over in the classroom. But the way that she interacts with him . . . her quiet confidence and the way she listens and responds to him conveys to him that he is valuable and that he can learn and that he is going to learn.

These responses highlight that as the PSTs grew in their knowledge and skill to teach reading comprehension with their student, they had the confidence to motivate their student to work towards reading comprehension growth and belief they can grow in their reading comprehension skill.

Formative assessment. Items 4 and 5 of the Culturally Sustaining Reading and Writing Pedagogy Self-Efficacy Scale (Caughlan & Cushman, 2013) focus on self-efficacy to assess students' reading skills and ascertaining which texts are a match for their skill level. It is critical that PDTs develop self-efficacy in assessing students' reading skills (Pendergast et al., 2015).

The importance of a readers' background knowledge has implications for teaching reading to diverse learners whose experiences and context may differ from students from the mainstream culture (Bui & Fagan, 2013).

Comparing the pre-test to post-test intervention groups, a significant difference was noted in PSTs' perceptions about their ability to accurately assess students' reading skills and ascertain which instructional materials best support their comprehension growth [t = 9.17, df =19, p = .00]. There was also significant difference found in the means of the post-intervention group and the control group [t = 11.24, df = 15.54, p = .00].

Qualitative data from focus group interviews, response journals, and the researcher's journal align with the quantitative findings that PSTs' self-efficacy to conduct formative assessments increased as a result of participating in the CRRRCII. During the intervention, PSTs shared that they grew more confident in using individual reading assessments to assess students' current reading knowledge and skills. In addition, PSTs shared that they grew more confident in assessing a student's background knowledge. Midway through the intervention, Participant 7 shared the following with me after class.

> I am so thankful for the training on how to use reading assessments. Knowing Sasha's reading level and comprehension skills helps me plan much better lessons for her. When I mix in books that match Lori's background knowledge, I can teach right in the zone, and she is really responsive.

In her reflection journal, Participant 9 showcases her self-efficacy growth in assessing a student's background knowledge.

> Before, I did not understand how a student's background can so heavily influence their learning. The way a student thinks, their background knowledge, what they are going to

> comprehend and what is going to be confusing for them, etc. is all influenced by their background. I know now how important it truly is to know your students well and to understand their background knowledge and experiences . . . I view [Joshua's] background as pathways to good teaching. I can build on his background in a lesson to help him learn new skills.

These two PST reflections underscore how PSTs grew in their self-efficacy to assess and build on students' skills and background knowledge when teaching reading comprehension. In both examples, PST grew in their ability to gather helpful assessment data, and they grew in their ability to use this data to inform their instructional decisions.

Targeted instruction. Items 2, 3, 6, and 7 of the Culturally Sustaining Reading and Writing Pedagogy Self-Efficacy Scale (Caughlan & Cushman, 2013) focus on self-efficacy to implement instruction that addresses the students' current reading knowledge and skill level. If PSTs are to provide literacy instruction to students in ways that address each student's specific strengths and needs, these PSTs need the self-efficacy to select appropriate instructional strategies and methods and develop the ability to adjust and adapt them as reading lessons unfold (Brock et al., 2007). Comparing the pre-test to post-test intervention groups, a significant difference was noted in PSTs' perceptions about their ability to target their instruction to students' current knowledge and skill level [$t = 11.22$, $df = 19$, $p = .00$]. Similarly, the mean targeted instruction scores from the post-intervention targeted instruction scores were statistically higher than the mean targeted instruction scores of the control group [$t = 13.26$, $df = 16.68$, $p = .00$].

Qualitative data from focus group interviews, response journals, and the researcher's journal coincide with the quantitative findings that PSTs grew in their self-efficacy to provide

targeted reading comprehension instruction to students from diverse cultural backgrounds. During the intervention, PSTs demonstrated increased confidence in their instruction through their responses and their actions.

During a focus group interview, Participant 7 confidently responded to the interview question about her recent field experience. Her answer reveals a clear instructional focus with supportive instructional components.

> Today I had my student compare and contrast the two cousins in a text. They were each from different cultures. Then at the end, I asked her to summarize what we learned in the book about each cousin and each culture . . . She was able to give me a strong summary for both. I think this was because she related to the cultures in the text . . . She also stayed focused on the lesson because she kept going back to the thinking steps on the anchor chart. She is learning to focus in and use the chart to keep her on track and reach the learning goal.

Similarly, Participant 6 shared about her growth in confidence for writing and implementing targeted instruction during a focus group interview.

> I'm more confident in coming in prepared with my lesson. I do feel better about writing my lessons, and they are definitely stronger. And then I am also becoming more flexible and comfortable with being flexible while I am teaching . . . I have a better grip on knowing how to do a think aloud and how to teach using an anchor chart. Today, we did some review from last week, and I was surprised how much he remembered. I think that it helped that the story was about a soccer player like him. He also had a lot of background that he connected to the story, which helped him fill in the graphic organizer that compared the main character traits to his own character traits.

The clarity with which the PSTs were able to describe the focus of their lesson and their instructional steps highlights their skill with identifying, planning for, and teaching targeted lessons. Their reflections on their instructional effectiveness promote a high level of instructional confidence.

Additional confirmatory evidence came from the English Language Learner (ELL) teacher from the partnership school. While she was walking through the hallway to pick up some of her students, the ELL teacher observed some of the PSTs tutoring students with whom she worked. The ELL teacher walked up to me and said the following.

> What are you teaching your students? I have never seen novice teachers teach reading with such skill and confidence. I cannot believe how responsive and engaged the students they work with were being. I work with some of them, and they have never responded like that for me. Whatever you are doing, keep it up because it is working.

In addition, after observing the second round of observations, the RA shared the following.

> The quality of the lesson plans surprised me. I believe that thinking through the instructional steps with such detail gives them a lot of confidence when they are teaching. They were not using the lesson plans as a script, but because they were so well prepared, they were able to flexibly respond to students as they learned in the moment. The preservice teachers were relaxed and so comfortable, yet they taught with precision and focus.

These examples support the conclusion that PSTs grew in their self-efficacy to provide targeted instruction that help students think deeply about and respond to texts.

Culturally responsive teaching tenets. Items 8, 9, 10, 11, 12, 13, 14, and 15 of the of the Culturally Sustaining Reading and Writing Pedagogy Self-Efficacy Scale (Caughlan &

Cushman, 2013) focus on self-efficacy to teach in ways that value and build on the cultural knowledge and skills that students bring to learning tasks. Culturally responsive teaching self-efficacy is a key component for preservice teachers to develop in order to teach reading comprehension to students from diverse backgrounds (Lazar, 2007). Preservice teachers who possess culturally responsive teaching self-efficacy are more likely to utilize culturally responsive teaching techniques and are more confident in their ability to work diverse student populations (Siwatu & Starker, 2010).

Comparing the pre-test to post-test intervention groups, a significant difference was noted in PSTs perceptions about their ability to implement culturally responsive teaching tenets to support the learning of students from diverse cultural backgrounds [$t = 11.22$, $df = 19$, $p = .00$]. Similarly, the comparison of control and post-intervention groups revealed a significant difference [$t = 14.36$, $df = 16.84$, $p = .00$]. Both of these findings suggest that PSTs developed higher culturally responsive teaching self-efficacy as a result of participating in the CRRCII.

Findings derived from the analysis of PSTs' response journals and the researcher's journal data align with the quantitative findings that PSTs grew in their self-efficacy to teaching reading comprehension within a culturally responsive teaching framework. In particular, PSTs' response journal data contained a culturally responsive teaching self-efficacy theme. Each PST provided evidence that their self-efficacy to teach in culturally responsive ways improved as a result of participating in the CRRCII. Some PSTs, such as Participant 10, shared in her response journal how participation in the course made them feel more equipped to target their instruction to build on the strengths that students bring to the learning task.

> This course has uniquely equipped us for culturally responsive teaching in many ways . . . I have learned to look for and provide representation of all students in the school and

> classroom. I have also learned to focus in on each student, to study and learn about them. Then I can transfer that knowledge into my lesson planning to be more effective and responsive to their unique learning experiences . . . I can make the lesson plan, tailoring and connecting it to their background knowledge, giving them tools to process and connect to new information.

Other PSTs like Participant 4 focused her response journal entry on how she felt more equipped to use a variety of instructional techniques to support the learning of students from diverse cultural backgrounds.

> What I learned in this class will change everything that I do with culturally diverse students. I will provide texts that will play to students' cultural strengths, help students process their thinking metacognitively, and provide them with meaningful learning opportunities. I feel as though I am better equipped to provide the best education possible for students of all cultural backgrounds as a result of this class.

During the last round of observations, the. RA noticed that Participant 3 demonstrated the culturally responsive tenet of creating a supportive environment with care and high expectations.

> That tutor is highly skilled at teaching comprehension strategies. But the most striking to me is the way that she interacts with him makes him feel known and that he belongs. He responds to her, and she can get him to really engage and think deeply. I am going to transfer the higher expectations of him to the classroom. I did not realize that he could think at those levels.

The statistical differences found between PSTs' pre- and post- as well as the post- and control self-efficacy scores in each of the four CSRWPSE constructs combined with well-aligned qualitative findings support the conclusion that PSTs grew in their self-efficacy to teach

reading instruction to students from diverse cultural backgrounds. The PSTs' growth in instructional self-efficacy corresponds with Fitchett et al.'s (2012) findings that PSTs who experienced an innovative instructional model during their course, grew in their self-efficacy to teach diverse learners. In their study with 20 PSTs enrolled in a social studies methods course, Fitchett et al. (2012) found a correlation between an innovative culturally responsive 3Rs instructional model (Review, Reflect, React) and PSTs' culturally responsive self-efficacy. Similarly, the self-efficacy growth in PSTs who participated in the CRRCII aligns with Gere et al.'s (2009) findings. Gere et al. (2009) found that PSTs who experienced supportive instruction and engaged in diverse field placements grew in their self-efficacy to teach diverse learners.

The findings of improved self-efficacy also align with the Bandura's (1986) self-efficacy theory which promotes that self-efficacy will improve with mastery experiences and social persuasion. During the CRRCII, PSTs engaged in 12 field placements experiences. Each field placement experience offered PSTs opportunities to develop and engage in mastery experiences that provided them with evidence of their ability to teach reading comprehension to students from diverse cultural background. In addition, the field experiences provided PSTs opportunities to engage in social persuasion as I gave them descriptive feedback on their comprehension lesson implementation.

Research Question Four

Analyzing the PSTs' experience within the CRRCII also required an examination of implementation fidelity, the degree to which the intervention was implemented at intended (Dusenbury et al., 2003). Failure to implement the CRRCII as intended could promote incorrect conclusions concerning observed findings credited to the intervention. Also, examining the dose and quality of the intervention delivery provides a framework for further interpretation and

explanation of PSTs changes in knowledge, skill, and self-efficacy to teach reading comprehension to diverse students (Dusenbury et al., 2003). Dose was described in more detail in chapter 4.

In this section, I examined the fourth research questions which focused on the dosage of the CRRCII. Dose can be defined as how closely the amount of delivered CRRCII instructional components adhere to the amount of CRRCII instructional components planned in the Output section of the CRCII Logic Model (Dusenbury et al., 2003). According to the researcher journal, all of the CRRCII focus lesson and leaning activities occurred on the days as scheduled (See Appendix E). All participants attended each focus lesson and learning activity except for Participant 5 missed focus lesson on 10/17/19 and 10/31/19. In both instances, the instructor met with Participant 5 at an alternate time during the same week to present the focus lesson.

Research Question Number Five

In this section, I examined the fifth research question, which focused on PSTs' satisfaction with CRRCII instructional components they experienced. To investigate PSTs' satisfaction with the CRRCII focus lessons, learning experiences, and field experience, qualitative data from focus group interviews and PSTs journal reflections were analyzed. Two main themes and three coding categories emerged from the qualitative analysis to provide insight into PSTs' satisfaction with the learning experiences they received during the CRRCII. The two emergent themes were *Highly Satisfied* and *Partially Satisfied.* The same codes were used for both themes, but the *Highly Satisfied* theme reflected at least two provisions of evidence for all three of the codes In contrast, *Partially Satisfied* reflected either less than two pieces of evidence per code or two or fewer codes with two pieces of evidence. Table 14 presents the *Highly Satisfied* emergent theme and codes.

Table 14

Process Evaluation Response Codes Grouped by Theme and Category

Highly Satisfied Response	Focus Lessons	Learning Activities	Field Experiences
Support for Developing Knowledge	Provided evidence that focus lessons supported the development of knowledge to teach reading comprehension to students from diverse backgrounds	Provided evidence that learning activities supported the development of knowledge to teach reading comprehension to students from diverse backgrounds	Provided evidence that field experiences support the development of knowledge to teach reading comprehension to students from diverse backgrounds
Support for Developing Skill	Provided evidence that focus lessons supported the development of skill to teach reading comprehension to students from diverse backgrounds	Provided evidence that learning activities supported the development of skill to teach reading comprehension to students from diverse backgrounds	Provided evidence that field experiences support the development of skill to teach reading comprehension to students from diverse backgrounds
Support for Developing Self-Efficacy	Provided evidence that focus lessons supported the development of self-efficacy to teach reading comprehension to students from diverse backgrounds	Provided evidence that learning activities support the development of self-efficacy to teach reading comprehension to students from diverse backgrounds	Provided evidence that field experiences support the development of self-efficacy to teach reading comprehension to students from diverse backgrounds

Participants categorized as *Highly Satisfied* provided at least two pieces of evidence of support for developing their knowledge, skill, and self-efficacy to teach reading comprehension to students from diverse cultural backgrounds for each of the three. Eighty percent (n=10) of the participants were categorized as *Highly Satisfied.* Comparatively, twenty percent (*n*=2) of the participants were categorized as *Partially Satisfied* because both participant's responses provided two supportive pieces of evidence in focus lesson and field experience category, but only one supportive evidence in the learning activities category. None of the participants shared any

negative perceptions about the components of the CRRCII. The following sections highlight various participants' responses to survey questions and reflective journal prompts as examples of how the focus lessons, learning activities, and field experiences supported PSTs' development of knowledge, skill, and self-efficacy to teach reading comprehension to students from diverse cultural backgrounds.

Participant 1 shared specifics in her final response journal on how the CRRCII helped her develop knowledge and skill.

> Before this course, I did not really have much experience working with students from diverse cultural backgrounds . . . I now feel much stronger in my ability to pick out culturally relevant texts. The lectures really helped me to learn how to teach specific reading strategies in a way that diverse students from different backgrounds can get the most out of the lesson . . . the learning activities also helped me reflect on how I could improve lessons and think deeply about how my student learns.

Participant 9 wrote the following in her response journal.

> This class was fantastic. I loved the interactive classroom time and also love how it paired well with tutoring. The best part about this class for me was the ability to talk about concepts, lesson ideas, and strategies in class and then to actually practice them with a student within a week. This really helped me apply what I had learned and also solidified it all in my mind better.

Eighty percent of participants (n=10) were categorized as highly satisfied. Analysis of focus interview and journal response data revealed 28 specific examples of how the focus lessons, learning activities, and field experiences helped them develop their knowledge, skill, and self-efficacy to teach reading comprehension to diverse students. The number of PSTs categorize

aa highly satisfied and the number of supportive examples provided by the PSTs suggests that PSTs' were satisfied with the components of the CRRCII.

Implications for Practice

The purpose of the CRRCII was to help prepare PST to teach reading comprehension to diverse students. The findings from this study align with other research on providing PSTs professional instruction indicate that it is possible to help PSTs improve their ability to teach diverse students about reading comprehension (Barnyak & Paquette, 2010; Hill, 2012; Lazar, 2007). The findings from this study which revealed meaningful changes in PSTs knowledge, skill, and self-efficacy to teach reading comprehension to students from diverse cultural backgrounds could be applied to future teacher education programs and to other teacher educators who want to prepare PSTs to effectively teach in diverse contexts. This study had a small participant sample and limited focus on reading comprehension instruction. However, the findings from the study suggest that providing PSTs with supportive instruction, learning experiences, and field experiences can help prepare them to implement supportive reading comprehension instructional practices with diverse students.

Intended and Unintended Outcomes

Preservice teachers demonstrated growth in all three of the study's dependent variables. Supportive qualitative data provided evidence for PSTs' growth in their knowledge, skill, and self-efficacy to teach reading comprehension to students from diverse cultural backgrounds. In addition, statistical change was noted in PSTs' skill and self-efficacy to teach reading comprehension to diverse learners.

An unintended outcome of the CRRCII was the development of PSTs' self-directed learning. Self-directed learning, according to Long (1994), is directing the learning process

consciously and consistently to understand new situations and concepts, to problem solve, and to strengthen skills. About four weeks into the intervention, a distinct shift occurred in PSTs' behavior, particularly regarding PSTs' work habits and goal setting. Similar to Gencel and Saracaloglu's (2018) findings, the PSTs began to independently engage in high levels of reflective thinking. In their study, Gencel and Saracaloglu (2018) investigated the influence of layered curriculum on PSTs thinking and self-directed learning with 81 PSTs enrolled in a Measurement and Evaluation in Education course. Using a sequential mixed-method design, the researchers collected pre-post survey data and interview data. The researchers used linear regression analysis on the survey data and analyzed the qualitative data through inductive coding. The study findings indicate that layered curriculum positively influenced PSTs' level of reflective thinking and self-directed learning.

PSTs who participated in the CRRCII took feedback on their instruction and learning experiences very seriously. They also began to question themselves on their instructional methods, investigate instructional alternatives, and adapt their instructional methods in order to create increasingly positive learning experiences for the student with whom they worked. During a focus group interview, Participant 6 shared the following.

> It is so important to reflect on each lesson and how strategies worked or failed. I wouldn't have the confidence or knowledge that I have now if I had not spent the time reflecting on what went well or how I could improve my lessons.

Similarly, Participant 5 shared during a focus group interview how she used her new knowledge and skill for teaching reading instruction and applied them to a problem she had in another practicum.

> Last week, I had to teach a science lesson in fifth grade. I was given a lesson that asked me to read a long text and then ask questions at the end. Instead of doing that, I broke up the reading . . . I stopped at each page with the important concepts and talked with the students about them. It felt good to be able to adapt a lesson that I was given.

The development of PSTs' independent problem-solving and goal setting could be because that the CRRCII provided a flexible learning environment where they had high levels of learning responsibility (Gencel & Saracaloglu, 2018). It is also possible that PSTs experienced a high level of readiness for self-directed learning because they believed they had the knowledge and skill to independently problem-solve (Gencel & Saracaloglu, 2018).

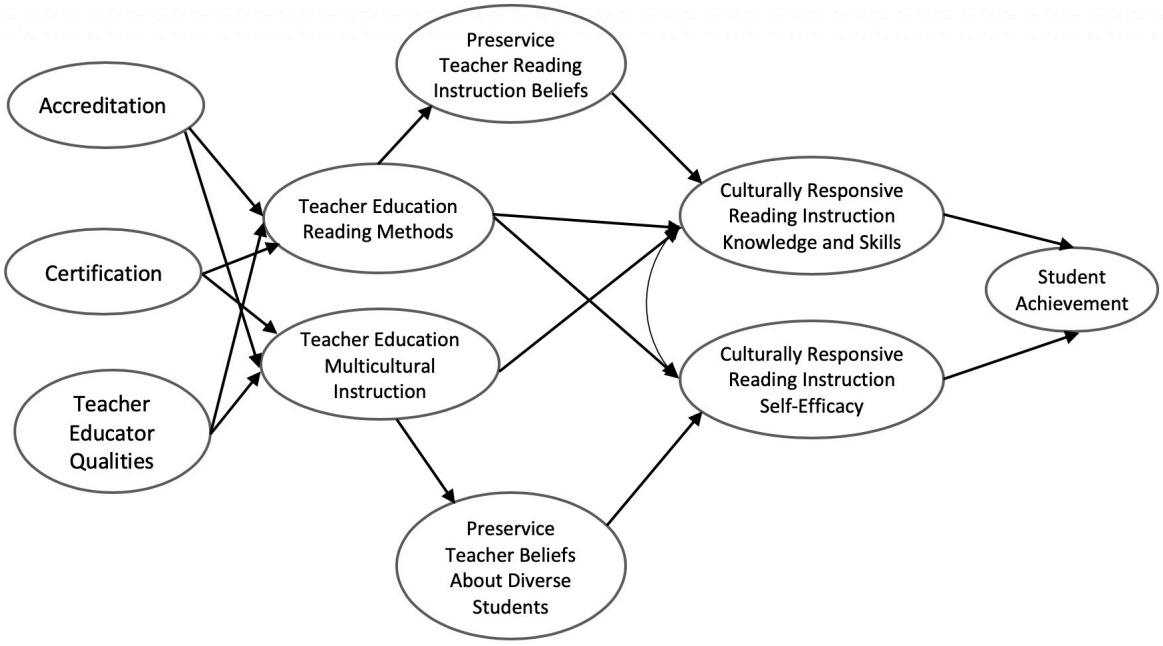

Figure 10. Conceptual Framework for Teacher Education and Preservice Teacher Beliefs Factors.

A revisit to my conceptual framework reveals that merging the reading instruction methods course component with the multicultural education instruction component created an effective intervention that helped PSTs develop their knowledge, skills, and self-efficacy in

culturally responsive reading instruction. Blending these two components generated an enriched instructional approached that offered researched-based instruction, field experiences, and learning experiences paired with crucial reflections. Although my conceptual framework inspired the planning of the CRRCII, the unique implementation facets of instructional responsiveness and knowledge of current neuroscience findings influenced the effectiveness of the CRRCII.

During the intervention, I intentionally taught the focus lessons and the learning experiences with responsivity to the PSTs' current knowledge and skill level. For example, I infused instruction with examples from current field experiences observations and I made connections from the instructional focus to PSTs comments and questions. Instructing in the manner helped me attend to the PST's experiences while tutoring and helped PSTs situate the instruction within their experience.

In addition, I infused aspects of learning research into the CRRCII implementation. As a doctoral candidate in the Johns Hopkins School of Education's Mind, Brain, and Teaching program, I learned helpful learning science content that I infused into the content and the implementation of the CRRCCII. For example, during one focus lesson, I had PSTs use the technique of elaboration to help them extend their learning. I also modeled how they could use the technique of elaboration during their field experiences. Elaboration, according to Brown, Roediger, and McDaniel (2014) is the process of enhancing the meaning of new material by expressing the new material in one's own words and connecting the new material to prior knowledge. The leading scientists Roediger and McDaniel, who spent their career studying learning and memory, pair up with Brown to present helpful instructional techniques in the text *Making it Stick*. The learning strategy of elaboration can help learners develop a stronger grasp

of the new material and help them embed the learning more firmly in their long-term memory (Brown, Roediger, & McDaniel, 2014).

Although instructional responsivity and the infused learning science content were not part of my conceptual framework, they both enhanced the CRRCII implementation. Both instructional techniques helped to create rich experiences that supported PSTs development of knowledge, skill, and self-efficacy to teach reading comprehension to students from diverse cultural backgrounds.

Limitations

Study limitations include sample size, intervention length, and researcher biases. The sample population size consisted of 10 White PSTs from a middle-class background who attend a university in the Midwest region of the United States. Though the study design used a convenience sample of PSTs enrolled in an advanced level reading methods course based on a workable context for the researcher, a larger sample size would support the generalizability of the study findings. A larger sample size of PSTs enrolled in reading courses from several universities might reveal enhanced information about the usefulness of implementing culturally responsive teaching tenets into a reading methods course. Also, the control group only received a post-survey and post-observation. A pre-survey and three rounds of lesson observations should have been conducted for the control group in order to conduct a higher quality comparison between the scores of the PSTs who participated in the intervention and the PSTs in the control group. Additionally, the small sample size likely influenced the statistical differences during data analysis.

The CRRCII was implemented for three months during the fall 2019 semester. The changes noted in PSTs' knowledge, skill, and self-efficacy to teach reading comprehension to

diverse learners is encouraging. However, the time period may not be sufficient to support PSTs' long-term commitment to adjust their reading comprehension instruction for diverse learners.

In addition, biases could have influenced study findings. It is possible that I, as the CRRCII instructor and study researcher, held biases that influenced data analysis and data collection. In addition, because of my dual role as instructor and researcher, there was a potential for subject bias as PSTs filled out surveys, wrote response journals, or answered survey questions. Although I tried to mitigate subject bias by emphasizing that their responses would not influence their grade and the goal of the data collection was to measure how their knowledge, skill, and self-efficacy changed as a result of participating in the CRRCII In some cases, PSTs may have provided responses that they thought I expected.

Future Research

In this study, PSTs grew in their knowledge, skill, and self-efficacy to teach reading comprehension to students from diverse cultural backgrounds as a result of participating in the CRRCII. Future research should be conducted to investigate if the PSTs continue to maintain and utilize their knowledge, skill, and self-efficacy as they move into student teaching practicum and their first years of teaching and need to teach reading comprehension to the whole class.

Also, during the focus group interviews, PSTs mentioned how they were transferring their knowledge and skill to create reading comprehension lessons for diverse learners into other methods courses. Future research could be conducted to investigate how the transference of PSTs' culturally responsive teaching skill and knowledge could be encouraged and sustained across methods courses.

Conclusion and Implications

This research study investigated the outcomes and experiences of 10 PSTs who participated in an advanced reading instruction course that incorporated the Culturally Responsive Reading Comprehension Instruction intervention. The participants demonstrated growth in their knowledge to teach reading comprehension to students from diverse cultural backgrounds as a result of participating in the CRRCII. Preservice teachers also showed some significant changes in their skill to teach reading comprehension to students from diverse cultural backgrounds as a result of participating in the CRRCCII. In addition, PSTs provided evidence for significant changes in all four factors of self-efficacy to teach reading comprehension to students from diverse cultural backgrounds as a result of participating in the CRRCII. Qualitative evidence helps explain the quantitative findings and suggests that the PSTs found the research-based instruction, learning activities with critical reflection, and field experiences as sources to help them develop their knowledge, skill, and self-efficacy to teach reading comprehension to students from diverse cultural backgrounds. Going forward, the MUTE program will intentionally infuse culturally responsive teaching instruction in all of the methods courses.

Grounded in sociocultural theory that learning is enhanced with the provision of supportive learning contexts with opportunities to learn from peers (Vygotsky, 1978), this study indicated that engagement in research-based instruction on culturally responsive reading comprehension, field experiences with students from culturally diverse backgrounds, and collaborative reflection activities can positively influence PSTs' knowledge, skill, and self-efficacy to teach reading comprehension to students from diverse cultural backgrounds. Therefore, the learning components of the CRRCII should be considered for inclusion in future teacher education reading methods courses as an approach to prepare PSTs to capably teach reading comprehension to elementary students from diverse cultural backgrounds.

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Appendix A

Preservice Teacher Survey

Thank you for agreeing to take part in this important survey to gather pertinent information concerning preservice teachers' beliefs. Results gleaned may help inform future teacher education design and programming. This survey should take less than ten minutes to complete. Your responses are voluntary, will be kept confidential, and will not be reported individually.

Gender: [ ] Male [ ] Female
Year in College: [ ] Freshman [ ] Sophomore [ ] Junior [ ] Senior
Age: _____
Ethnicity: [ ] African American [ ] Asian [ ] Latino [ ] Native American [ ] White [ ] Other
Program Status: [ ] Have not applied [ ] Conditional [ ] Professional
Program: [ ] Elementary [ ] Secondary

1. I believe my culture to be different from some of the children I serve.

   ___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

2. I believe it is important to identify immediately the ethnic groups of the children that I serve.

   ___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

3. I believe I would prefer to work with children and parents whose cultures are similar to mine.
   ___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

4. I believe I would be uncomfortable in settings with people who speak non-standard English

   ___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

5. I believe I am uncomfortable in settings with people who exhibit values and beliefs different from my own.

   ___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

6. I believe other than the required school activities, my interactions with parents should include social events, meetings in public places (e.g., shopping centers) or telephone conversations.

   ___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

7. I believe I am sometimes surprised when members of certain ethnic groups contribute to particular school activities (e.g., Bilingual students on the debate team or Black students in the orchestra).

___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

8. I believe the family's views of school and society should be included in the school's yearly program planning.

___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

9. I believe it is necessary to include on-going parent input in program planning.

___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

10. I believe that I sometimes experience frustration when conducting conferences with parents whose culture is different from my own.

___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

11. I believe the solution to communication problems of certain ethnic groups is the child's own responsibility.

___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

12. I believe English should be taught as a second language to non-English speaking children as a regular part of the school curriculum.

___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

13. I believe when correcting a child's spoken language, one should role model without further explanation.

___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

14. I believe that there are times when the use of non-standard English should be ignored.

___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

15. I believe in asking families of diverse cultures how they wish to be referred to (e.g., Caucasian, White, Anglo) at the beginning of our interaction.

___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

16. I believe in a society with as many racial groups as the U.S.A., I would expect and accept the use of ethnic jokes or phrases by some children.

___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

17. I believe that there are times when racial statements should be ignored.

___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

18. I believe a child should be referred for testing if learning difficulties appear due to cultural differences and/or language.

___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

19. I believe adaptations in standardized assessments to be questionable because they alter reliability and validity.

___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

20. I believe translating a standardized achievement or intelligence test to the children's dominant language gives the child an added advantage and does not allow for peer comparison.

___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

21. I believe parents know little about assessing their own children.

___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

22. I believe that the teaching of ethnic customs and traditions is NOT the responsibility of public school programs or personnel.

___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

23. I believe it is my responsibility to provide opportunities for children to share cultural differences concerning food, dress, family life and/or beliefs.

___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

24. I believe Individualized Education Programs meetings or program planning should be scheduled for the convenience of the parent.

___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

25. I believe adaptations in programming to accommodate the different cultures as my enrollment changes.

___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

26. I believe the displays and frequently used materials within my setting should show at least three different ethnic groups or customs.

___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

27. I believe in a regular rotating schedule for job assignments which includes each child within my setting.

___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

28. I believe one's knowledge of a particular culture should affect one's expectations of the children's' performance.

___ strongly agree ___ agree ___ neutral ___ disagree ___ strongly disagree

29. Do you feel prepared to teach students from diverse cultures? Why or why not?

30. Describe an assignment or an activity from one of your teacher education courses that best prepared you to teach students from diverse cultures.

31. Name two strategies that you have used that supported the learning of students from diverse cultural backgrounds.

32. What goals do you have for teaching culturally diverse learners?

33. What advice would you give the Mason Teacher Education Program regarding ways to help preservice teachers feel prepared to teach students from culturally diverse backgrounds?

Appendix B

Equitable Tutoring Practices Observation Checklist

Equitable Tutoring Practices Observation Checklist							
This document is a checklist of 10 specific, observable preservice teacher behaviors that reflect equitable tutoring practices.							
Name		Observer		Lesson Focus		Date/Time	
Instructional Equitable Classroom Practice						Observed (1 point)	Not Observed (0 points)
1. The preservice teacher uses a variety of visual aids or props to support the student's learning.							
2. The preservice teacher ensures instructional materials and visuals reflect the racial, ethic, and cultural background of the student.							
3. The preservice teacher models the use of graphic organizers.							
4. The preservice teacher identifies the student's current knowledge before instruction.							
5. The preservice teacher uses the student's real-life experiences to connect school learning to the student's life.							
6. The preservice teacher uses probing and clarifying techniques to assist the student's responses.							
7. The preservice teacher asks the student higher-order questions.							
8. The preservice teacher uses wait time.							
9. The preservice teacher gives the student effective, oral feedback that prompts improved performance.							
10. The preservice teacher asks the student for feedback on the effectiveness of instruction.							
Comments:							

Appendix C

Culturally Sustaining Reading and Writing Pedagogy Self-Efficacy Scale

Culturally Sustaining Reading and Writing Pedagogy Self-Efficacy Scale										
Directions: This questionnaire is designed to help us gain a better understanding of the kinds of thing that create difficulties for teachers in their school activities. Please indicate your opinions about each of the statements below. Your answers are confidential.	To what extent?									
	Not at all		Very little		Some		Quite a bit		A great deal	
When you teach reading, to what extent do you feel able to:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. Get students to believe they can do well in reading?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2. Model genre-specific reading strategies to enhance all students' understanding?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3. Improve the understanding of a student who is confused by a text?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4. Assess students' reading abilities?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
5. Ensure all of your students have appropriately challenging readings?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
6. Identify your students' reading preferences and build upon them?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
7. Provide alternative explanations when students are confused about reading?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
8. Develop a community of learners when your class consists of students from different backgrounds?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
9.help your students maintain their heritage language(s)?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
10. help your students value sharing their different cultures?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
11. Help your students value sharing their different languages?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
12. Support your students' multilingualism with readings?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
13. Support your students' multiculturalism with readings?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
14. Adjust your reading lessons to the cultural understandings of your individual students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
15. Adjust your reading lessons to the linguistic knowledge of your individual students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)

Appendix D

CRRCII Components

Component	Timeline	Duration	Description	Example
Focused Lesson	10 weekly sessions occurred between September 6 and November 14	One half hour	Instructional lesson on teaching reading comprehension within a culturally responsive teaching framework	Instruction on valuing and building on students' strengths
Learning Activity Paired with Critical Reflection	Nine weekly sessions occurred between September 17 and December 3	One half hour	Engaging learning activities and collaborative reflection that promote learning extensions and critical reflection	Principled improvisation that practices problem solving techniques for students who struggle with comprehension because of cultural barriers such as vocabulary and background knowledge
Field Experience	12 weekly sessions occurred between September 17 and December 3	75 minutes	Each PST taught reading comprehension lessons to a second or third grade student from a culturally diverse background	Preservice teachers my teach a lesson on identifying character traits.

Appendix E

CRRCII Focused Lessons and Learning Activities Components

Components	Timeline	Description
Culturally Responsive Teaching Components (Gay, 2000) Focus Lesson	9/5/2019	Instruction on valuing and building on students' strengths, teaching through culture, reading in a sociocultural context, creating a supportive learning climate, and building empathy
Selecting Culturally Relevant Texts (Sharma & Christ, 2017) Focus Lesson	9/10/2019	Instruction on how culturally relevant texts support comprehension instruction for students from culturally diverse backgrounds including how to evaluate text quality, select the appropriate level, and identify text elements that connect with students' background experiences
Supportive Read Aloud Protocols (May, Bingham, & Pendergast, 2014) Focus Lesson	9/12/2019	Instruction on approaches to read aloud events, how text to talk supports culturally diverse learners with their comprehension, and supportive think aloud strategies to use with read alouds
Courageous Creativity (Beghetto & Kaufman, 2010) Learning Activity	9/17/2019	Instruction on how to approach design with optimism and positivity, develop a good relationship with failure, embrace risk taking, and build empathy
Think Aloud with Supportive Anchor Charts (Aceves & Orosco, 2014) Focus Lesson	9/19/2019	Instruction on how to script think alouds and create accompanying anchor charts to explain the thinking steps in a reading strategy
Developing Robust, Adaptable and Creative Habits (Beghetto & Kaufman, 2010) Learning Activity	9/24/2019	Application exercise of collaborative adjusting instructional technique
Graphic Organizers (Aceves & Orosco, 2014) Focus Lesson	10/1/2019	Instruction on how graphic organizers support reding comprehension of students from diverse cultural backgrounds and creative application of graphic organizers
Assessing for and Building on Background Knowledge (Brown, 1998,1999) Focus Lesson	10/3/2019	Instruction on assessing students' background knowledge, modeling metacognition, and modeling making connections to texts
Culture and Learning (Hammond, 2014) Learning Activity	10/10/2019	Instruction on mental models, collectivism and individualism, and oral and written traditions
In -The-Moment Metacognition (Griffith, 2017) Learning Activity	10/15/2019	Modeling of adaptive expertise in metacognitive awareness (noticing, drawing attention to,

		reflecting on, and evaluating instructional decisions)
Vocabulary Instruction (Gee, 2008, 2015) Focus Lesson	10/17/2019	Instruction on connecting instruction to students' background experiences and knowledge, providing a mediating experience, and providing learning experiences with multiple modalities
Questions (Hammond, 2014) Focus Lesson	10/24/2019	Instruction on how to create higher order questions, ask clarifying questions, restate a question, provide adequate wait time, and paraphrase student responses
Equitable Learning Opportunities (Gee, 2015; Hammond, 2014; Ladson-Billings, 2009) Learning Activity	10/29/2019	Instruction on history of literacy instruction opportunity gap and an example of a dream delayed from Ladson-Billing's (2009).
Descriptive Feedback (Cole, 2008) Focus Lesson	10/31/2019	Instruction on goal setting and giving descriptive feedback, and eliciting student feedback concerning their learning experience
Teacher Expectations (Hammond, 2014) Learning Activity	11/5/2019	Instruction on providing a balance of care and high expectations in order to help students develop a positive mindset and self-efficacy
Student Feedback (Bellon, Bellon, & Blank, 1992) Focus Lesson	11/7/2019	Instruction on creating learning goals with students, modeling metacognition, and supporting students to provide feedback concerning their learning experience
Principled Improvisation (Philip, 2019) Learning Activity	11/12/2019	Creative improvisation of practice-orientated problem solving in response to reading instruction problems
Systemic Injustices in Schools (Banks, 2016; Hammond, 2014) Learning Activity	11/19/2019	Instruction on implicit bias and sociopolitical contexts
Invitation to be a Change Agent (Banks, 2016; Hammond, 2014) Learning Activity	12/3/2019	Instruction on leading for equity and interrupting instructional or institutional practices that are unjust

Appendix F

Focus Group Questions

Round One

1. Describe your tutoring experience today.

2. What are culturally relevant texts? How are you implementing culturally relevant texts during your field placement to support your tutee's text comprehension?

3. Tell me an example of using a culturally relevant text in a comprehension lesson with your tutee. How confident did you feel about selecting and implementing culturally relevant texts in your lessons?

4. How have the learning activities in this course helped you to select and implement culturally relevant texts in your lessons to support the reading comprehension of your tutee?

Round Two

5. Describe your tutoring experience today.

6. What are read aloud protocols? How are you implementing read aloud protocols during your field placement to support your tutee's text comprehension?

7. Tell me an example of using a read aloud protocols in a comprehension lesson with your tutee. How confident did you feel about implementing read aloud protocols in your lessons?

8. How have the learning activities in this course helped you develop your ability to implement read aloud protocols in your lessons to support the reading comprehension of your tutee?

Round Three

9. Describe your tutoring experience today.

10. What is cognitive strategy instruction? How are you implementing cognitive strategy instruction during your field placement to support your tutee's text comprehension?

11. Tell me an example of using cognitive strategy instruction in a comprehension lesson with your tutee. How confident did you feel about implementing cognitive strategy instruction in your lessons?

12. How have the learning activities in this course helped you develop your ability to implement cognitive strategy instruction in your lessons to support the reading comprehension of your tutee?

Appendix G

Summary Matrix Tables

Table G1

Summary Matrix for the Process Evaluation Data Collection Plan

Process Evaluation Question	Process Evaluation Indicators	Data Sources	Data Collection Tool	Frequency	Data
Are preservice teachers receiving an adequate amount of learning experiences to support growth in their skill level and to teach reading comprehension to elementary students from diverse cultural backgrounds?	Evidence of appropriate text selection	Preservice teachers	Review of observation checklists	Once a month	Descriptive statistics run in SPSS
		Preservice teachers	Focus group interviews	Once a month	Data will be deductively analyzed using a priori codes
	Evidence of appropriate reading strategy selection	Preservice teachers	Review of observation checklists	Once a month	Descriptive statistics run in SPSS
		Preservice teachers	Focus group interviews	Once a month	Data will be deductively analyzed using a priori codes
	Evidence of appropriate read aloud protocols	Preservice teachers	Review of observation checklists	Once a month	Descriptive statistics run in SPSS
		Preservice teachers	Focus group interviews	Once a month	Data will be deductively analyzed using a priori codes
	Preservice teachers express self-efficacy to create reading instruction lesson plans with appropriate texts, reading strategies, and read aloud protocols	Preservice teachers	Document analysis of critical response journals	Once a month	Data will be deductively analyzed using a priori codes
			Focus group interview	Once a month	Data will be deductively analyzed using a priori codes
	Preservice teachers express self-	Preservice teachers	Document analysis of	Once a month	Data will be deductively analyzed using a priori codes

Process Evaluation Question	Process Evaluation Indicators	Data Sources	Data Collection Tool	Frequency	Data
	efficacy to implement reading instruction lesson plans with appropriate texts, reading strategies, and read aloud protocols	Preservice teachers	critical response journals Focus group interview	Once a month	Data will be deductively analyzed using a priori codes
Are preservice teachers receiving an adequate amount of learning experiences to support growth in their self-efficacy to teach reading comprehension to elementary students from diverse cultural backgrounds?		Preservice teachers Preservice teachers	Document analysis of critical response journals Focus group interview	Once a month Once a month	Data will be deductively analyzed using a priori codes . Data will be deductively analyzed using a priori codes
Are preservice teachers satisfied with the services they receive?	Self-reported satisfaction	Preservice teacher	Focus group interview	Once a month	Data will be deductively analyzed using a priori codes

Table G2

Summary Matrix for the Outcome Evaluation Data Collection Plan

Process Evaluation Question	Process Evaluation Indicators	Data Sources	Data Collection Tool	Frequency	Data Analysis
How does PSTs' knowledge to teach reading	Evidence of appropriate	Preservice teachers	Reflection journal	Once a month	Data will be deductively analyzed using a priori codes

Process Evaluation Question	Process Evaluation Indicators	Data Sources	Data Collection Tool	Frequency	Data Analysis
comprehension to elementary students from diverse cultural backgrounds change through participation in the CRRCII?	text selection	Preservice teachers	Focus group interviews	Once a month	Data will be deductively analyzed using a priori codes
	Evidence of appropriate reading strategy selection	Preservice teachers	Reflection journals	Once a month	Data will be deductively analyzed using a priori codes
		Preservice teachers	Focus group interviews	Once a month	Data will be deductively analyzed using a priori codes
	Evidence of appropriate read aloud protocols	Preservice teachers	Reflection journal	Once a month	Data will be deductively analyzed using a priori codes
		Preservice teachers	Focus group interviews	Once a month	Data will be deductively analyzed using a priori codes
How does PSTs' skill to teach reading comprehension to elementary students from diverse cultural backgrounds change through participation in the CRRCII?	Evidence of appropriate text selection	Preservice teachers	Review of observation checklists	Once a month	Descriptive statistics will be run in SPSS
		Preservice teachers	Focus group interviews	Once a month	Data will be deductively analyzed using a priori codes
	Evidence of appropriate reading strategy selection	Preservice teachers	Review of observation checklists	Once a month	Descriptive statistics will be run in SPSS
		Preservice teachers	Focus group interviews	Once a month	Data will be deductively analyzed using a priori codes

Process Evaluation Question	Process Evaluation Indicators	Data Sources	Data Collection Tool	Frequency	Data Analysis
	Evidence of appropriate read aloud protocols	Preservice teachers	Review of observation checklists	Once a month	Descriptive statistics will be run in SPSS
		Preservice teachers	Focus group interviews	Once a month	Data will be deductively analyzed using a priori codes
How does PSTs' self-efficacy to teach reading comprehension to elementary students from diverse cultural backgrounds change through participation in the CRRCII?	Measures of self-efficacy	Preservice teachers	Culturally Sustaining Reading and Writing Pedagogy Self-Efficacy Scale (Caughlan & Cushman, 2013)	Pre/Post	Descriptive statistics will be run in SPSS and a Paired T Test will be utilized
		Preservice teachers	Focus Group Interviews	Once a month	Data will be deductively analyzed using a priori codes

Biographical Information

Beth Vander Kolk is an assistant professor of reading instruction at a Midwestern American university. Beth began her career as a first-grade teacher, where she developed a passion for reading instruction and multicultural education. When she transitioned to higher education, Beth infused both passions into her reading instruction courses.

After completing her Doctor of Education degree from Johns Hopkins University, Beth looks forward to her expanding role as a scholar-practitioner. She plans to continue to pursue her research interests in reading instruction, culturally responsive teaching, and creativity and education. Beth also intends to continue to prepare preservice teachers to effectively teach reading skills and strategies to students from various cultural backgrounds.